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THE HABITATIONS OF THE POOR.

MANY years ago, we were a juvenile auditor amongst a crowded assembly in the chapel of a provincial town, listening, with eager attention, to the statements of a well-known African traveller. All that he then uttered has faded from our recollection, with the exception of a single incident in the discourse. Speaking of the degradation of Africa, and its deficiency in even the very *elements* of civilization, the reverend traveller lifted the open Bible from the pulpit cushion, and told his audience that the *streets* of Latakoo were no wider than *that*. If the *manner* as well as the *matter* of this fact struck the audience as it did the writer, the impression made must be numbered amongst those which are called indelible.

Let us suppose an intelligent native of Latakoo or Timbuctoo halting at the foot of that great thoroughfare, Holborn Hill, and venturing to peep up narrow, crooked, notorious FIELD LANE. "Here," he might exclaim, "in the greatest, the noblest, the mightiest capital of the world, is a *street* which reminds me of my native town! It is crooked, turns round with a fine curve; narrow, so that two persons can hardly pass without jostling each other; busy, like the busy thoroughfare of a great metropolis!" Yes! stranger, fear not to enter Field Lane! Once on a time, you might have been dragged into a Jew's den, hustled, or teased: but there is no danger now; the invisible strong arm of the law follows you along Field Lane. Here, as you perceive, is a type or a memorial of those streets of London of the olden time, along which Great Plagues walked, or over which Great Fires triumphed. Standing in the centre of this famous alley, you can almost touch the houses on either side—those old dingy, dirty, tumble-down wooden houses, toppling towards each other. Their basements are occupied by old clothesmen, or rather old ragmen, dealers in rusty locks and nails, and polishers of old boots and shoes. But stay—there seems to be some kind of obstruction a little way up the alley. Banners of many-coloured hues and patterns are floating over-head, and shut up the vista—are these the banners of some knight-errant order, and is this the chapel royal where its installations are held? Venture further, and fear not; these *banners* are those convenient affairs without which a man scarcely feels himself a man, and the corner of one of which, projecting from the coat pocket, was formerly the sign of a fop or a fool. The vendors will sell you one, cheap, if you can deal with them—but ask them no questions respecting the *merchants* who supply them with their stock!

Suddenly Field Lane terminates in a *street* somewhat wider than the paved alley through which we have come. This street boasts a little slip of pavement on either side, and a morsel of causeway in the centre. Its width lets in more of heaven's light and air than can fall down on Field Lane—but this only serves to reveal more fully the dingy, squalid, filthy aspect of the place. It rises up an eminence, and is known as Saffron Hill—strange, that like Rosemary Lane, some of the filthiest spots of London should have name and nature standing as antipodes! Inhabitants, not native, nor yet "to the manner born," may be seen standing at some of the entrances, and heavy feet may be heard making the wooden stairs to creak; here reside the Paddy Kews, and the Bill Sikeses, the Dennis O'Raffertys, and the Artful Dodgers, who assist in maintaining our vast judicial establishment—our judges, and our barristers, and our attorneys, in active employment. Is it summer evening, and are you pensively inclined? Come here, and have your ideas of the nature which you wear cast down to the ground and fit to be trampled under foot—for out of some passage a number of men, women and children, may rush, some covered with blood, others fighting like furies, while the howlings, yells, and cries, make the place seem an abode of demons. Or is it a Monday or a Tuesday morning, and have you ascended a little higher? Groups of men and women, evidently of the lowest rank in society, are standing along the edge of the narrow pavement. Is there some procession about to pass? It is *only* the customary collection, awaiting to see the prisoners proceeding by the back way to Hatton-Garden Police-Office. But what is this curious machine that rumbles through the narrow street? It seems a compound of the hearse and the omnibus—too slightly constructed as a conveyance for prize oxen, or as one of the waggons of a menagerie—yet built for *animals* of some kind; for though no windows are in the sides, light and air are admitted through a grating on the top. Mark the driver—he is in uniform, and drives soberly; the *conductor* behind is also in uniform; his hand is on the handle of the carefully-shut door, and he does not look around for passengers. Nothing appears on the vehicle to indicate its nature, save the royal arms and "V. R."—the mystery is revealed, it carries a cargo to the House of Correction!

What connexion is there between dirt and crime? between a tumble-down house and moral degradation? Does Spitalfields supply the Central Criminal Court with as many subjects as Saffron Hill or St. Giles? Is the mind as well as the body under the influence of a puddle and tainted air? Does cleanliness rank next to godliness? Scotland has long held a conjoined character, and has been famous for orderly habits and dirty ones; and in Ireland, where too many live in mud hovels, and huddle together, the standard of female personal character is comparatively high. But in London, the chief abodes of vice as well as misery, of crime as well as poverty, have ever been its dirty, dingy, squalid spots. The mazes of the Seven Dials and of St. Giles, lying like a breakwater between the "east" and the "west" ends; squalid Tothill Street and its neighbours, within a stone-throw of venerable Westminster Abbey and the Houses of Parliament; Saffron Hill, or Spitalfields, or Ratcliffe Highway, or Rosemary Lane, names which are each the representatives of a congeries of low and miserable lanes, alleys, and streets, are all notorious for whatever sinks man into something worse than a beast. They are "Sloughs of Despond," that mending seems only to mar; where inexperience, and modesty, and ingenuousness, are too apt to disappear, and then to rise again to the surface, changed into rioting, drunkenness, recklessness, shameless effrontery, and dextrous cunning.

"The labouring classes," says the prospectus of the Society for bettering the Habitations of the Industrious Poor, "are, in most

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cases, densely congregated (one house being usually inhabited by several families) in the alleys, courts, and lanes of the metropolis. Their dwellings, owing in some cases to the poverty, in others to the vicious habits, of their occupants, are, for the most part, devoid of cleanliness, order, or comfort. Some families, indeed, enjoy the comparative luxury of a separate day and sleeping-room; but the great majority possess only a single apartment, which is at once the day-room and the common sleeping-place of parents and children. Others, in a more destitute condition, are still more densely congregated, several families occupying the same room; an arrangement necessarily productive, not only of bodily disease, but of a still more baneful moral contagion, the diseased and the healthy being crowded together, and the young and innocent brought into immediate association with the hardened and abandoned.

"But a closer and more circumstantial knowledge of the existing condition and manner of living of the working classes, may be obtained from the following results of a laborious investigation, lately instituted in one of the districts of the parish of Marylebone, namely, that, in 315 houses which were visited, the number of families was 915; the number of families in which there were children, 578; the number of children, 1575. The habitations generally had a bare, desolate, and untidy appearance; nothing had an appropriate place. There were 510 children who went to school, and 1065 who did not. Of the girls who had learnt to sew and wash, there were 492, and 227 who had not; the number of children bringing up to some trade was 160, and no less than 1415 who were not; 349 families appeared cleanly and healthy; 175 dirty, but healthy; 53 dirty, and unhealthy; 58 much distressed; 513 had a good supply of water, and 64 had not. Drains, sewers, and pavings, were wholly wanting in some of the courts and alleys.

"In one district, called the Hell, there was a large unoccupied piece of land before the houses, full of mud, manure, and stagnant water; 324 families were here living in airy rooms, and 249 in confined rooms; there appeared to be a general ignorance on the subject of ventilation: although the air in many of the rooms was impure in the highest degree, so as to be extremely disagreeable to those entering them, the parents seemed to be seldom alive to the propriety of opening a window. But there is one fact, of a character which cannot but be peculiarly afflicting to those who hear it; out of 578 families with children, 308 were found to be occupying only one room, and consequently father, mother, brothers, and sisters, were all sleeping together!" It is added, that other facts could be related of an equally demoralizing tendency, even with regard to children of the tenderest years, but that they are of a character unfit for publication.

Such is one feature of this "great metropolis;" a city not only great in its extent, but great in its charities—a city crowded with churches, and chapels, and hospitals, a great central dépôt of the world's benevolence, enterprise, and humanity! Other large cities of this most Christian kingdom present, according to their respective sizes, and the variable nature of their population, similar incongruities. Birmingham and Manchester, Leeds and Liverpool, Edinburgh and Glasgow, contain deplorable contrasts; but Dublin, as might be expected, exhibits them in shocking opposition. Under the walls of the "Castle" lie streets more squalid, more filthy, and more deplorable, than even those of the filthiest part of St. Giles; while the stranger cannot walk in any quarter without being incessantly reminded of the abject and helpless poverty of a very large body of the inhabitants. There, too, may be seen human beings—creatures bearing the shape and name of man—living, not in damp cellars, nor yet in ruined houses, but crouching in some excavation, made perhaps in a heap of rubbish.

These, it may be said, are anomalies in our civilisation, blots on our social condition; but they are inevitable in our present state of society, and their removal must only be waited for in its gradual progress and amelioration. Look, it may be added, at all that has been already done; compare the condition of the labourer of the present generation with that of his predecessor; and see the great changes that have been effected in the outward condition and aspect of our large towns. We are quite aware of all this; and, to our minds, it is an additional inducement for active and extraordinary exertions to remove the evils that still exist. English society has within it materials for a tremendous explosion. We are fast advancing to a state of active revolution. Far would we be from enacting the worse than useless part of a mere alarmist—of shouting "Wolf! wolf!" or proclaiming falsely that there is a lion in the street. But the rapid growth of our population—the disjunction and determined opposition of great masses—the extraordinary ignorance that yet prevails amongst large sections of the population—are all calculated to make thoughtful minds look forward with anxiety. Hitherto the vital energy of that great and influential portion of British society, the MIDDLE CLASSES, has carried us safely through the changes and alterations that have taken place. As long as that heart of England remains sound, we need fear no evil. But the middle classes are exposed to the action of circumstances calculated to impair their strength and vigour. We have no right to expect that they will continue to present an effectual resisting medium to the accumulating pressure from below; and our only effectual remedy is at once boldly to descend, and examine the nature and extent of that evil, which may otherwise roll its dark and turbulent waters over the whole structure of our civilisation.

A society has been formed, which proposes to take effectual measures for "bettering the habitations of the industrious poor" in the metropolis. The *idea* is admirable. The condition of the habitations of a people is a grand test of their state of civilisation. Were the nests and rookeries of large towns pulled down, and their places supplied by comfortable habitations, adapted to the resources of the working classes, a vast improvement would be made on their whole moral, mental, and physical character. But how is this to be accomplished? Certainly, not by the classes themselves. Setting aside the helplessness of their position, they have received but a very small share of that knowledge so widely diffused amongst the middle classes, and which has taught *them* the means of remedying evils formerly tolerated as part and parcel of their existence. As little are we to expect that the improvement will proceed from the landlords of St. Giles or Saffron-hill. "With respect to the rents paid for their miserable accommodation, it may be observed, that the lodging-houses of the labouring classes are now generally in the hands of persons who lease the whole and sub-let the rooms at weekly rates, varying from 1*s.* 6*d.* to 4*s.*, and even as high as 5*s.*, each; a price which is calculated to be double the sum paid for similar accommodation by the higher classes, who enjoy the additional advantages of a more convenient house in a superior situation. It has been ascertained, for instance, that a house in the parish of Marylebone, costing in annual rent and taxes 43*l.*, produces, when let off in rooms at weekly rents, the sum of 64*l.* 10*s.*; yielding to the first lessee a profit of 21*l.* 10*s.* A smaller house, costing the lessee 12*l.* per annum, rent and taxes, readily produces 20*l.* per annum, when let off, as before stated. In the first instance, therefore, the profit is one-half; and, in the second, two-thirds of the original rent.

"These high charges, of which, be it observed, the vicious are the principal cause, and the well-conducted the victims, are necessarily made, not only in consequence of the frequency with which the weekly rents are wholly evaded by the lodger, but to cover the expense of repairing or replacing fixtures damaged or destroyed by tenants of careless or profligate character. Indeed, so great is the loss sustained on property of this nature, that the owner of a number of four-roomed houses in Marylebone parish, let in lodgings, under the present system, wearied out by the uncertainties of payment, and by the continual outlay caused by wanton destruction, lately offered the whole on a repairing-lease for the mere ground-rents, thus at once consenting to sink the entire cost of the erection and fittings of the dwellings."

We know nothing whatever of the infant society, whose prospectus has led us into writing the remarks we have made. Much perseverance, much caution, and much skill, will be requisite in the conducting of the experiment. We are not very sanguine about its success. But if it goes straightforward in its plan; if it carefully eschews any attempt to convert the society into a *political* engine, and avoids all attempts to *patronise* or *manage* its tenants, or to undermine the natural independence of character which should be cherished, then we cordially wish it success.

"It is intended that the society shall take, on lease, some courts, alleys, or small streets, conveniently situated, and as far isolated as possible from the influence of evil association. The houses in the first instance are to be thoroughly repaired and drained; and provided with every requisite for due ventilation and warmth, together with such accommodation, as to cupboards, shelves, &c., as may contribute, at small expense, to the reasonable comfort of the tenants.

"The houses thus prepared are intended to be opened for the reception of weekly lodgers, on such a scale of rents as may be compatible with the expenses and liabilities of the society. And as it may be presumed that a respectable society, becoming the responsible tenant, and sub-letting the dwellings *to persons of good character only*, could obtain them at a rate somewhat lower than the present rent, it follows that the tenants of the society may reap a corresponding advantage.

"The immediate object of this society, then, is to provide *for the deserving poor*, at a rate somewhat below the current rents, apartments of an improved description, arranged and conducted with a careful reference to the health, comfort, and morals of their occupants. In effecting this desirable object, the society's operations cannot fail to act as a premium on good conduct in the working classes generally, even beyond the circle of those more immediately benefited. They will teach a great moral lesson, in a form palpable to the senses of those whom they cannot directly influence, by connecting solid advantages with good conduct, and thus stamp such a value upon character, as will encourage the well-disposed to persevere in a respectable course, and prove an inducement to the idle and vicious to forsake habits of life pregnant with degradation and suffering.

"It is hoped that an institution of this kind will be considered peculiarly adapted to the present day, since the prominent aim of recent legislation for the poor has been to eradicate the demoralising system of voluntary pauperism, and to mature a healthy feeling of self-respect, and an honourable determination to look to the fruits of industry alone for subsistence."

We are reluctant to make promises: but there are necessarily a variety of subjects which, on their first introduction into a periodical such as ours, can only be briefly discussed, leaving details to future articles. The "Habitations of the Poor" is one of those subject

WE MIGHT HAVE BEEN!*

BY THE LATE L. E. L.

We might have been!—these are but common words,
And yet they make the sum of life's bewailing;
They are the echo of those finer chords,
Whose music life deplores, when unavailing.
We might have been!

We might have been so happy, says the child,
Pent in the weary school-room during summer,
When the green rushes, 'mid the marshes wild,
And rosy fruits attend the radiant comer.
We might have been!

It is the thought that darkens on our youth,
When first experience—sad experience—teaches
What fallacies we have believed for truth,
And what few truths endeavour ever reaches.
We might have been!

Alas! how different from what we are,
Had we but known the bitter path before us;
But feeling, hopes, and fancies, left afar,
What in the wide bleak world can e'er restore us?
We might have been!

It is the motto of all human things,—
The end of all that waits on mortal seeking;
The weary weight upon Hope's flagging wings;
It is the cry of the worn heart, while breaking—
We might have been!

And when, warm with the Heaven that gave it birth,
Dawns on our world-worn way Love's hour Elysium,
The last fair angel lingering on our earth,
The shadow of that thought obscures the vision,
We might have been!

A cold fatality attends on love,—
Too soon, or else too late, the heart-beat quickens;
The star which is our fate springs up above,
And we but say—while round the vapour thickens—
We might have been!

Life knoweth no like misery,—the rest
Are single sorrows,—but in this are blended
All sweet emotions that disturb the breast:
The light that was our loveliest is ended.
We might have been!

Henceforth how much of the full heart must be
A sealed book, at whose contents we tremble?
A still voice mutters, 'mid our misery,
The worst to hear—because it must dissemble—
We might have been!

Life is made up of miserable hours;
And all of which we craved a brief possessing,
For which we wasted wishes, hopes, and powers,
Comes with some fatal drawback on the blessing.
We might have been!

The future never renders to the past
The young beliefs intrusted to its keeping.
Inscribe one sentence—life's first truth, and last,—
On the pale marble where our dust is sleeping—
We might have been!

* From the New Monthly Magazine.

THE STRUCTURE AND FUNCTIONS OF THE HUMAN FRAME.

ALL living bodies, whether vegetable or animal, are composed of *organs* (instruments), that is, of parts having a determinate structure and form, and performing specific *functions* or actions, thus giving rise to the phenomena which collectively are denominated *life*. For example, the heart is an organ, the function of which is the circulation of the blood. Anatomy is the science which relates to organs; Physiology, to functions; the one is the science of *organisation*, the other of *life*.

Organs are divided into two classes, differences in the functions they perform being the basis of the classification. Some functions have for their purpose the support and protection of the individual being and the perpetuation of its species: others are subservient to sensation and voluntary motion. Taken collectively, the functions of the former class are designated by the expression, "*organic life*;" those of the latter by the expression, "*animal life*." Organic life (which is sometimes, and, in our opinion, with less ambiguity, denominated, *vegetative* life) is possessed by all organised beings, vegetables as well as animals,—hence its name. Animal life is so called because it is characteristic of animals alone, vegetables being altogether destitute of sensation and the power of spontaneous motion.

This distinction between the two great divisions of the organic world occasions important *formal* differences between them even in those points in relation to which they essentially agree. It is evident, for example, that the nutritive organs of beings which move from place to place must vary considerably from those possessed by beings which remain fixed in the same spot and are constantly in contact with their food, as is the case with vegetables. All the parts of an organised being are closely connected with, and exert great influence upon one another, and therefore each must be formed in reference to all the rest, in order that they may co-operate harmoniously. In the animal, the organic functions are subordinate to those of the animal life, and are modified in accordance with them. Nevertheless, the former are carried on independently of the latter, and sometimes even after they have wholly ceased. The heart may continue to beat, although the brain, the organ of sensation, has become incapable of performing its office. The organic life, on the contrary, is essential to the animal: the instant the vegetative functions stop, animal life is destroyed. It rests upon the organic—the organic is independent and original.

Gradual development is one of the characteristics of organised beings. Unlike mere matter, which, so far as our *observation* extends, has neither commencement nor end, their individual existence has a clearly marked beginning as well as termination. Small and feeble at first, it is only by degrees, in many instances by exceedingly slow degrees, that they attain their full size and vigour. The acorn is an organised body, the germ of the future oak. It contains the yet feeble living principle, and the rudiments of the organs which in process of time will attain the strength and magnificent development of the mighty tree, formed to endure for centuries, and successfully to resist the operation of the all-powerful elements. It is long before the weak and helpless infant becomes the powerful man: the change from one state to the other is so gradual as to be almost unobserved. In both these instances the phenomena referred to consist in the increase of the size of the organs composing the body. To prepare the materials thus disposed of, and to arrange them in their proper order, is one of the functions of organic life.

No function can be performed without waste of the substance of the organ by which it is carried on: hence, but for compensatory processes, organised beings, instead of increasing or maintaining their bulk, would be in a state of incessant decay and diminution. The constituent particles of all living bodies are in a perpetual flux: every instant old particles are carried out of the system and new particles are brought into it. The functions by means of which the compensation above mentioned is effected, are the same in kind, though differing in degree, as those which develop the germ and bestow upon it the proportions of maturity.

All forms of being existing on the surface of our globe are exposed to the action of physical agents, and are subject to the operation of physical laws. Air, water, light, heat, cold, electricity, are constantly at work, disorganising some bodies and reconstructing others. The hardest rock is not exempt from their destroying influence. The process may not be perceptible, yet it gradually moulders away beneath their united operation, and enters into new combinations. Yet the most fragile plant or the minutest animal modifies the action of these seemingly resistless elements. So long as the living principle is vigorous, they, within a certain range, are rendered subservient to it,—nor, indeed, could life be otherwise maintained. This remarkable characteristic of organisation is also the result of the functions of the organs of organic life.

The materials out of which nutriment (that is, the matter which develops and maintains the body) is elaborated, are called *food*. The food of vegetables consists of inorganic matter, chiefly air and water. That of animals is derived from the organic world, either vegetable or animal, the food of man being of both kinds. To extract from the food those portions of it which are fit to become incorporated with the body, is the office of one set of the organs of organic life, to which the name *digestive* (separating) has been given.

The *mouth* and *teeth* perform the first part of the digestive process. In the mouth the food is divided into minute fragments by means of the teeth, the muscles of the lower jaw, and the tongue, and is mixed with various fluids, the chief of which is *saliva*.

The food, having thus been reduced into a soft pulp, passes down the *œsophagus* or *gullet* into the stomach, a membranous bag, capable in the adult of holding about three pints, and situated in the upper part of the abdomen. There it is exposed to the action of the gastric juice, a fluid secreted (that is, separated from the blood) by the minute blood-vessels of the internal lining of the stomach, or mucous coat. The gastric juice is universally considered by physiologists to be the principal agent in effecting the changes which the food undergoes in the stomach, consisting in the complete dissolution and intimate mixture of all its component particles; so that, however numerous and varied may have been the articles eaten, they are converted into a mass perfectly homogeneous, that is, possessing in all its parts the same sensible qualities, though, of course, partaking of the character of the food from which it is formed. This new product, the result of the second stage of the process of digestion, is called *chyme*.

As the chyme is gradually formed from the food in contact with the mucous coat, it is carried by the contractions of the muscular coats towards the right extremity of the stomach, where it accumulates until admitted through the *pyloric* orifice into the first intestine or *duodenum*, so named on account of its usual length, which is about *twelve* inches.

This chamber is a second stomach, which continues the process commenced in the first. It is assisted by two organs of considerable magnitude, the *pancreas* and *liver*, the former lying immediately behind the stomach, and resting upon the spinal column, the latter situated on the right side of the abdomen, above and in front of the pyloric extremity of the stomach. Both these organs belong to that class of the organs denominated *glands*, whose functions consist in the separation of peculiar fluids from the blood, which are used for various purposes in the animal economy, and of which *saliva* and *tears* are well-known examples. The secretion of the pancreas is called the *pancreatic juice*, that of the liver, the *bile*. These fluids are slowly, drop by drop, conveyed by small tubes or *ducts* into the duodenum, and perform an important part in the changes effected in the chyme.

The duodenum secretes a fluid which possesses a solvent power analogous to that of the gastric juice. By its admixture with this and the two above-mentioned secretions, all of which are highly animalized, the chyme is brought nearer the chemical constitution of the blood, and the separation of its nutritive from the excrementitious portions appears to be facilitated. Soon after it is mixed with the bile, the compound separates into a whitish tenacious fluid called *chyle*, which is the nutritive essence of the food, and into a yellowish grey pulp, its useless refuse. The chemical qualities of the chyle differ in an important respect from those of chyme; the latter is acid, the former alkaline. It is this change which assimilates it to the blood.

The motions of the duodenum are irregular—first in one direction, then in another; yet gradually they propel its contents into the second portion of the small intestines or *jejunum*, whence they pass into the last or *ileum*. The inner or mucous coat of these tubes, especially of the former, is disposed in folds, which serve the double purpose of affording a greater absorbing surface and of retarding the progress of the chyle, so that none may be lost. These folds are thickly studded with innumerable absorbent vessels, the mouths of which, so small as to be invisible to the unassisted eye, open on the surface of the intestines and take up the chyle. These vessels are exceedingly minute, and composed of membranous coats, so transparent that the colour of their contents is distinctly seen through them, from which circumstance they derive their name, *lacteals* or *milky*-vessels. The lacteals penetrate the coats of the intestines, and, gradually converging, at length unite and

form the *thoracic duct*, by which the elaborated chyle is conveyed upwards through the *thorax* or chest, and poured into the left subclavian vein. Thence it passes into the superior *vena cava*, which conveys it to the right side of the heart.

Meantime, the innutritious portion of the food, mingled with various animal substances, no longer fit to remain in the system, enters the large intestines, along which it is slowly moved by the action of their muscular coats; and every particle of nutriment having been extracted from it by absorbing vessels, which exist, in greater or less abundance, in all parts of the intestines, the residue is expelled from the body.

We have thus traced the changes which food undergoes in the digestive organs, extracting its nutritive portions and assimilating them to the blood, and have followed the course of the chyle until it mingles with the vital current. Another change is yet necessary, however, to render that fluid capable of supporting life. Before we explain this final process of digestion, it will be convenient to give an account of the blood and its circulation; the process which completes the elaboration of fresh nutriment also exercises a most important influence upon the perfectly formed blood.

Blood is the fluid by which life is supported: its elaboration from food, and its maintenance in a pure and healthy state, is the object of the combined operation of nearly all the organs of organic life. In proportion as these grand processes are performed well or ill, the entire animal economy enjoys good or suffers ill health. Though apparently a simple fluid, blood is in reality one of the most complex substances with which we are acquainted, composed, according to the most recent analysis, of about twenty distinct ingredients, the elements of all the diversified structures and secretions of the body. The relative proportions of the constituents of the blood are different in every individual, and in the same individual at different times. Age, sex, state of health, food, and many other circumstances, cause them to vary, and every variation affects in some manner the condition of the frame.

It has been already mentioned that loss of substance invariably attends the action of organs: it is for the purpose of compensating this loss that blood is required. Hence no function can be performed without the presence of the blood: the brain cannot feel, nor the limbs contract, without a due supply of this, which is therefore emphatically denominated the *vital* fluid. The apparatus by which it is distributed to every part of the body is the next subject to be considered.

This apparatus consists of two parts, the organ which communicates the impulse to the blood, and those which convey it to and fro. The former is the *heart*, the latter are the *blood-vessels*, which are divided into two classes, *arteries* and *veins*. The heart in man is a conical-shaped muscular body, possessing both elastic and contractile powers and containing four cavities or receptacles for the blood, separated from one another by a most exquisite set of contrivances in the shape of muscular partitions and membranous valves. To these cavities the names right and left *auricle*, right and left *ventricle*, have been given; the functions of which, and of the blood-vessels, we now proceed to explain.

Supposing the blood to be in the left ventricle, we will follow its course from that organ.

The muscles which compose the sides of this cavity are the thickest and strongest portion of the heart, a circumstance necessary to enable it to perform its function of propelling the blood into the arteries over the whole body. The left ventricle contracts four thousand times in an hour, and at each contraction forces into the great artery or *aorta* about two ounces of blood. The aorta gives off several large arteries, which, by their successive subdivisions, convey the blood to every part of the body.

Arteries are composed of three layers of membrane, which together form a tube of great strength and elasticity. It is by means of the latter quality that they assist in the circulation; by maintaining a constant pressure upon their contents, they regulate and render equable the flow of the blood. Arteries successively increase in number and diminish in size, each trunk dividing into two or more branches, and this subdivision proceeds until the ultimate arteries or *capillaries* are so minute as to be imperceptible to the unaided eye. These capillaries penetrate every organ and tissue *, and are the immediate agents in building up structure, in conveying nourishment to the entire frame, and in performing the function of secretion. They terminate, it is supposed, in canals worked out in the substance of the various tissues, each of which, by means of its vital power, attracts from the blood flowing through it those particles with which it has a chemical affinity: bony particles are not deposited in the brain, nor the constituents of muscle in the bones:—each tissue receives those ingredients only of the blood of which it is itself composed. It is this conversion of blood into structure which constitutes the process of *nutrition*. At the same time particles which had formed part of the living structure, but have lost their vital properties and become noxious, being separated from the structures with which they had been connected, are poured into the blood, either to be conveyed out of the system or to be renovated.

Where the arteries terminate, the veins begin: the blood passes into them to be carried back to the heart. Veins differ in several important respects from arteries: they are more capacious, and though composed of an equal number of coats essentially the same in structure, are much thinner, and destitute of elasticity. The inmost coat of most veins is formed into numerous folds, which serve for valves and prevent the return of the blood.

Converging from all parts of the body, the veins at length unite to form two large vessels, the superior and inferior *venæ cavæ*, which meet at the entrance of the *right auricle* of the heart, into which they discharge their contents along with the newly-formed nutriment, and thus the greater or *systemic* circulation is completed.

The blood brought back differs widely, however, from that which was sent from the left side of the heart. In its course through the body it has undergone changes of a very striking kind. Instead of the bright scarlet hue which it possessed in the arteries, it is now of a deep dull purple colour; nor is the alteration in its essential properties less remarkable. Venous blood is not capable of maintaining either the organic or animal life; it is arterial blood deprived of its nutritious particles, and loaded with worn-out or noxious atoms collected from all parts of the body. That it is inadequate to support life is certain, numerous experiments having been made which conclusively prove that within four minutes after the supply of arterial blood is cut off, and venous blood alone is circulated in the body, life becomes extinct beyond the possibility of recovery.

Now, inasmuch as a quantity of blood equal to the total quantity contained in the system is propelled from the heart about twenty times every hour, it is evident that there must be some contrivance by means of which the vital properties of arterial blood are restored to venous blood, otherwise no animal could exist. What that contrivance is, is now to be explained.

The principal ingredients in venous blood, the presence of which deprives it of its nutritive qualities, are *carbon* and *hydrogen*, the former one of the most extensively diffused elements in nature, forming the basis of a great number of minerals and of most vegetables; the latter a gas, the lightest of known bodies, and one of the elementary substances into which all animal matter is resolvable. Carbon enters largely into the composition of our food, and thus gains admittance into the system, where it would soon accumulate to excess, and subvert the very foundations of the animal economy, but for the provision for its expulsion. The contrivance for restoring to venous blood the vital qualities of arterial blood, is simply one for removing from it the carbon and hydrogen with which it abounds. The manner in which this important object is accomplished is one of the most beautiful applications of chemical laws with which we are acquainted.

The right auricle, into which, as already mentioned, the venous blood is discharged by the veins, injects it into the right ventricle, whence it is propelled into the *pulmonary* artery, which divides into two branches, one going to each *lung*. The lungs are two large oval-shaped bodies, composed of light cellular tissue, situated one on each side of the *thorax* or *chest*, with the walls of which they are in contact, the heart being in the centre. They are full of exceedingly minute cells, in which the subdivisions of the *trachea* or *windpipe* terminate, so that each cell has free communication with the atmosphere. On the inner surface of these cells the ultimate ramifications of the pulmonary artery are spread, forming a net-work of vessels, which, on account of its complexity, is called *rete mirabile*, the wonderful net-work. Thus there are two sets of vessels traversing the substance of the lungs in all directions, air-vessels and blood-vessels, the contents of which are brought into contact with each other in the *air-vesicles*, or cells, above mentioned, which, though contained within so small a space, are so admirably arranged, and so numerous, as to afford, according to the most moderate estimate, a surface of 20,000 square inches. Here, also, venous is converted into arterial blood. That our readers may comprehend this change,

* Tissue is the name given by physiologists to the various forms of matter of which the body is composed: the principal tissues are the membranous, the muscular, and the nervous.

a few remarks must be premised on the nature of the atmosphere and on chemical affinity.

The air is a mixture of two of those simple substances to which chemists have given the name of elementary, viz., *oxygen* and *nitrogen*, or *azote*, with a very small proportion of *carbonic acid*, and water in the state of vapour; the two latter are not considered essential constituents of the atmosphere.

"Chemical affinity, which is sometimes also called chemical attraction, is the power by which bodies combine (always in fixed and definite proportions) and form compounds invariably possessing some properties very different from those of their constituents, and frequently diametrically opposite to them." One substance may have this power in reference to several other substances, the degree of its affinity being generally different with each. If such a substance is in combination with a body whose affinity with it is weak, the application to the compound of a third substance, having a more powerful affinity with either of the constituents of the compound than they have with each other, causes the dissolution of the combination, one of the ingredients uniting with the third body, leaving the other in its simple state.

Let us now apply these facts to the elucidation of the phenomena of *respiration*.

Carbon is in combination with the blood flowing in the lungs: oxygen is *mixed*, not *combined*, with nitrogen in the air-cells. Carbon and oxygen have a mutual affinity, and, in certain circumstances, when brought into contact, immediately unite, forming *carbonic acid gas*. This is the phenomenon that takes place in the lungs. Atmospheric air is conveyed into them by every act of inspiration: by every act of expiration carbonic acid is evolved from them. That it is the oxygen of the air which combines with the carbon of the blood, is proved by chemical analysis of the air expired, from which a large proportion of oxygen is found to have disappeared, its place being supplied by an equal quantity of carbonic acid gas, the amount of nitrogen remaining almost the same. By this means, the excess of carbon in the blood is removed from it, to the amount, according to some calculations, of upwards of ten ounces in every twenty-four hours. It is supposed, that a small quantity of oxygen and azote is absorbed into the blood and retained in the system, thus compensating for the loss of carbon.

A portion of oxygen unites with the hydrogen of the blood, forming water, which is expelled from the lungs in the form of vapour.

Venous blood being thus freed from its noxious ingredients, resumes the sensible qualities and essential properties of arterial blood. It becomes of a bright scarlet hue, and is again capable of nourishing the body. From the capillaries of the pulmonary artery it passes into the capillaries of the pulmonary veins; these, four in number, two to each lung, return the renovated blood to the left auricle of the heart, whence it passes into the left ventricle, to be again circulated all over the body.

There are thus two circulations of the blood in the human body, one from the left ventricle, throughout every part of the frame, and terminating in the right auricle, to which the designation *systemic*, or greater circulation, is given: the other, beginning at the right ventricle, through the lungs, and ending in the left auricle, is called the *pulmonic*. The latter is subsidiary to the former, being necessary for the purpose of bringing the vitiated blood in contact with the vital agent, the air, by which it is purified.

The processes which renovate the venous blood complete the preparation of the fresh nutriment, which, having been intimately mixed with the blood in the right side of the heart, is, along with it, exposed in the lungs to the action of the air, from which it receives those vital qualities that render it capable of supporting life.

We have thus briefly described the more important processes of organic life—digestion, circulation, nutrition, and respiration, by which blood is formed, distributed, and maintained in a state of purity. In the next chapter we shall complete the account of the organs whose functions relate to the blood, and of the organic life generally.

REVENGE.

A MOMENTARY triumph, of which the satisfaction dies at once, and is succeeded by remorse; whereas forgiveness, which is the noblest of all revenges, entails a perpetual pleasure. It was well said by a Roman Emperor, that he wished to put an end to all his enemies by converting them into friends.—*Tin Trumpet.*

EXTRACTS FROM A SAILOR'S JOURNAL.

THE following extract from the journal of an officer during the American war, "the war of independence," may perhaps interest our readers, as the genuine detail of the exultation of a successful fight and the depression of a capture. We must first premise that the writer was captain of the Weymouth, a Government packet, "bound from Falmouth in Cornwall to Madeira; Senegal on the coast of Guinea; round to all the British Islands in the West Indies, and from thence back to Falmouth, with his Majesty's mail and dispatches," and now on her return home.

"Sunday, 27th July, 1777.—Saw several cruizers, these two days past, giving us chase, which we imagine to be American privateers: got clear of them all. This day, moderate and hazy weather; under lower topmast, top-gallant and studding sails, and royals, &c. &c. At eleven A.M. saw a brig, almost ahead of us, about two leagues off, standing to the northward, under a main and fore sail; and at half-past she wore, set her topsails, and bore down on us. Took in all our studding and small sails; got all hands to quarters; cleared and barricadoed the ship. At noon, latitude observed, 45° 17′ N., longitude 33° 33′ W.; the longitude bearing E. by N. ¼ N., distant 388 leagues; and Cows (one of the Western Islands) bearing S. by E. ½ E., distant 114 leagues; hauled our courses up, as the brig was within random shot of us, coming up with us very fast, with an English jack hoisted. We hoisted jack, ensign, and pendant, St. George's colours, and fired a six-pounder shot athwart the brig's forepole; and soon afterwards she hoisted the thirteen stripes, with a small union in the upper corner; and then, being close alongside of us, within less than pistol-shot of us to windward, hailed, and desired us to strike to the honourable the Congress directly, or else they would board us, and give us no quarter; which we answered with a whole broadside fore and aft, which did great execution, and took place well, being close alongside of each other. She then gave us hers, with a vast fire of small arms, which tore our sails, &c. a good deal; and then attempted to board us in the waist, which I prevented by sheering our ship to starboard, and giving her another broadside, which did them a great deal of damage: and so continued engaging each other very warmly for about an hour, in which time she attempted to board us again twice, which we prevented as before; but she in this time shot away our ensign halyard, by which the ensign fell into the water; but we soon got him on board and hoisted again, and soon after shot away the enemy's ensign-staff, which fell overboard, and hoisted no more ensigns during the engagement. She now began to work one pump continually, and at three-quarters past one P.M. she was obliged to keep both pumps going, when she began to slack in the fire of her great guns, but kept a continual heavy fire of small arms, and began to haul off, and we close after her on the quarter, as well as we could, being much impeded in our sailing by our maintop-sail tie and all our braces being shot away, with a great deal of our running and standing rigging, &c. &c. Notwithstanding, we galled her very much, and kept within less than musket-shot of her until a quarter past six, when she began to gain on us very fast, on account of our being obliged to sheer often very much, to bring our guns to bear on her, on account of our ports being too small. At half past two, she put before the wind, when she began to get from us very fast; and at three got so far off, that all firing ceased, though we made all the sail we could after her until nine o'clock at night, when we lost sight of her, and kept on our course.

"She was a 'Mudian-built, long brig, about two hundred tons burden, carrying sixteen guns in the waist, and two close aft, all six-pounders, which appeared by the shot that came on board of us: full of men and swivels. She must have sustained a great deal of damage in the engagement, as the decks seemed to be greatly thinned before she parted from us; and we observed her main and fore rigging much cut, and flapping to the masts, and the water pumping from her in great streams continually, quite clear. We received a good deal of damage in our sails and rigging, and had nine people wounded; amongst which number was Captain William Judd, late commander of his Majesty's ship Antelope, and Robert Holden, esq., of Jamaica. Our ship's company, in general, on this occasion did their duty manfully, coolly, and behaved very well.

"N. B. By the different accounts we have had of this engagement, since our landing in America, we find the brig to be the Washington, belonging to Salem, one Rogers captain. They acknowledge eighteen men killed and thirty-five mortally wounded, and the brig cut all to pieces.

"Monday, 28th July, 1777.—Moderate and fair weather; under all our sails. Wind about W.N.W.; steering E. People employed repairing our rigging, and cleaning our guns and repairing our gun-carriages and breechings,—all which was damaged in yesterday's engagement. At noon, (latitude observed 45° 52′ N., longitude 30° 28′ W., the longitude bearing E. by N. ¼ N., distant 341 leagues,) the man at the mast-head saw a sail in the northern quarter, bearing down on us. At one P.M. saw her from the decks, plain, coming up fast with us, though we had top-gallant, studding sails and royals, &c. set: steering our course. Made her out to be a large ship, but, from her situation, and as the wind then was, found it impossible to take any advantage of her, by steering any other course.

"Ditto. Sent all hands to dinner, and gave the ship's company a pint of grog each.—At four P.M., the ship coming up with us very fast, cleared and barricadoed the ship, and got everything to rights and in good order by six o'clock. At eight, she being within gunshot of us, hauled down all our studding sails, and handed top-gallant sails, &c., and made a speech to the people, to encourage them all I could to do their duty,—stand close and firm to their guns and quarters.

"At ten, she ranged up on our starboard side, and hailed us, and we her; when I found her to be the Oliver Cromwell frigate-of-war, belonging to the state of Connecticut, Seth Harding, captain, fitted out from New London. After talking to each other for about half an hour, she dropped a good way astern; on which, I went down again into the waist amongst the people, to encourage them to do their duty, and keep close and quiet, without any noise: but soon found there was an opinion propagated among them, by some bad man or other, that the Oliver Cromwell had fifteen ports of a side, and was a thirty-six or forty gun ship, which I denied, and reasoned with them all in my power to convince them of the contrary. I then called the master and principal officers on the quarter-deck, and told them of my determined resolution to defend the ship, mail, and despatches, to the very last extremity; and that I hoped and recommended them to do the same, in case of any accident happening to me; and at the same time begged they would stay with the people, and keep them strict to their duty and quarters, and have everything clear and ready for engaging. And as she was then a good way astern, I took the opportunity of going down to the cabin, to Captain Judd and the rest of the passengers, (who were all there, and mostly ill, occasioned by the fatigue they had yesterday,) to consult with them, and acquaint them of my determined resolution to defend the ship, &c. to the very last extremity, within the bounds of reason and prudence. But, as they seemed to intimate that she was a very large ship and an over-match for us, I told them that I was fixed in my opinion to engage her, and made no doubt but we should be able to give a good account of her. Still, notwithstanding, if, after we were engaged, I found her an over-match and too heavy for me, and that I had no chance to get clear, rather than sacrifice my people, I would yield to a superior force; which they in general approved of. Then, finding the Cromwell was coming up with us, went directly on deck, when, to my great surprise, I heard somebody calling out to haul the colours down; on which, I jumped on the quarter-deck, called Mr. Jenkins (the master) to me, and desired him to see all hands at their quarters, to mind my orders, and that there should be no noise; and if I heard any person (be they who they may) mention a word about hauling the colours down or striking, I would that instant blow his brains out.

"By this time the enemy ranged close on our starboard side, and hailed us to strike, or else they would sink us; which I refused, and ordered my people to fire away and engage, which some did with five guns only; and, on the enemy's giving us her broadside of great guns and small arms, all my ship's company, except about five, and the three principal officers, most ingloriously fled from their quarters down between decks, to my great mortification; which obliged me, after receiving three or four of her broadsides, to go down into the waist, where the mail and despatches were ready slung, and throw them overboard, and then, as I had no person to manage a gun, ordered the colours to be pulled down. She dismounted one of our guns, lodged several nine-pounders in our sides, tore the boat very much, and did us considerable damage. Soon after, her boat came on board, with Timothy Parker, her first lieutenant, &c.; by whom I found I had struck to the Oliver Cromwell privateer, a rebel frigate of war, of twenty carriage guns—14 nine and 6 six-pounders, on one deck, with swivels, and 155 men, Seth Harding, captain; fitted out of New London, and belonging to the state of Connecticut. She had been out six weeks, and took two other prizes, and sent them for America. I, and my doctor, and most of my people, were carried on board the Cromwell, and the passengers left on board the Weymouth. Found in the Cromwell above two-thirds of the ship's company English, Scotch, and Irish. She came out with 175 men, and all the people they took since entered on board of her.

"This journal, from Jamaica to this day, examined, approved, and signed by all the passengers,—viz. William Judd, esq., late captain of his Majesty's ship Antelope, under Admiral Gayton; Robert Yealden, esq., of Kingston, Jamaica; Edward Manby, esq., of ditto; Mr. Thomas Storrow, of ditto; Mr. Daniel Sullivan, of ditto; Mr. Thomas Kirwan, of ditto.

"Tuesday, 29th July, 1777.—A fresh gale westerly. On board the Oliver Cromwell, a prisoner, very ill with a nervous fever and dry gripes, and very weak, and not able to take any nourishment of any kind.

"Sunday, 3d August, 1777.—This morning departed this life, on board the Weymouth, (*supposed by a fright* he took in the engagement of the 27th,) George Mathews, one of the Weymouth's people. Heard Captain Judd was very ill."

A tedious detention of several months was the result of this capture, but the Captain effected an exchange in March 1778, and continued in the service of his country to the day of his death many years after.

LES HIRONDELLES.*

(THE SWALLOWS.)

CAPTIVE on the Moorish strand,
A warrior groaned beneath his chain;
Swallows from his father-land
He saw come flying o'er the main.
"Tell me, ye birds of hope!" he cried,
"Who hither from stern winter flee:
Ye saw my France in summer's pride,—
Looks she still fair?—sweet birds, come tell to me.

"Three years—three sad years, alas!
I've linger'd here, a weary slave!—
Denizens of air! ye pass
Unrestrained o'er earth and wave!
There stood a cot, with flowers gay,
Where the young stream winds thro' the vale,
'Twas there my eyes first met the day!—
Is it unchanged? Ah, tell the welcome tale!

"'Neath that roof there hung a nest,—
Perchance it held your callow young:
But, whilst cherish'd by your breast,
My mother's plaints around them rung;
Yet still she hoped each day would bring
Homeward her son—a stranger there.
She breathed my name, expiring;—
Oh! tell me of her love, children of air!

"Saw ye not the jocund throng
Flock from the church in concourse gay,
Chorussing th' hymeneal song,
To grace my sister's nuptial day?
Saw ye not my comrades crowding,
Vaunting their deeds by land and sea;
But my name in sorrow shrouding,
They still, sweet birds!—they still remember me?

"But I dream!—my foe commands
Where none but Frenchmen should bear sway;
And perhaps his hostile bands
To that calm vale have traced the way;
Trampling down the fields' defenders,
Drenching the soil with native gore!
Can ye say that France surrenders?
Unwelcome birds!—away, I'll hear no more!"

* From the French of Beranger.

ANIMAL MAGNETISM.

NO. II.

EARLY PROGRESS OF ANIMAL MAGNETISM, WITH A NOTICE OF MESMER'S DISCIPLES.

MESMER, though by nature an empiric, was, nevertheless, sincere in his belief, both in the actual existence of animal magnetism, and in the medicinal virtues which he ascribed to it. But, like that venerable dreamer, Hahnemann, of homœopathic celebrity, he had founded the superstructure of his system upon the assumption of a fact not true. As the edifice of homœopathy rests upon the allegation that Peruvian bark, which is a specific against intermittent fever or ague, produces that disease when taken by persons in health*, so that of Mesmerism, as understood by its founders, was raised upon the supposition, that the magnetism of the loadstone acted upon and withdrew the morbiferous particles from the animal frame, when under the influence of disease.

Accordingly, the first applications of the magnetic power to the human frame were made by means of metallic tractors, which appear to have been nothing more than common artificial magnets. These applications, under varied circumstances, were said to relieve or to produce pain, to occasion convulsive twitchings in different parts of the body, to cause excitement or depression, faintness, and even syncope. Some real, and some pretended cures took place; the first being no doubt effected by faith in the remedy, and its consequent action upon the imagination. Where the proper degree of faith did not exist, the remedy was found to be without efficacy.

By limiting the communication of animal magnetism to the sole agency of metallic tractors, Mesmer could not, after the effect of the novelty had subsided, keep alive the first excitement of his fickle-minded patrons in France; he therefore invented the *baquet*, the use of which was attended with certain mystic forms and ceremonies likely to act upon the imagination. The *baquet* was a circular tub with a cover, placed upon a pedestal. In it were bottles full of magnetised water, communicating with wires projecting from the tub, by means of holes in the cover. The patients of both sexes stood round the baquet, each holding a wire. To increase the effect, the room was darkened, and much mysterious ceremony observed in introducing the patients.

The baquet was eminently successful, and mysterious apartments were fitted up in many of the hotels† of the nobility, for the application of Mesmerism by means of the baquet. In these apartments, in which members of the highest class of society of both sexes assembled, scenes of astounding and inconceivable profligacy were of daily occurrence. These at last became so notorious that Mesmer, who certainly did not participate in, although his invention of the magnetic baquet had occasioned them, was ashamed of the effect he had unintentionally produced; and his renunciation of the baquet, as one of the means of magnetic application, was the consequence.

We have already stated that Mesmer was naturally a quack, although he had a sincere faith in the efficacy of animal magnetism. His own usual practice of it was by means of metallic tractors; but the baquet became necessary, as part of the quackery of his system, to keep excitement alive; and he well knew that, by quackery alone, he could command ultimate success in bringing animal magnetism into permanent repute. The use of the baquet was therefore propagated, and led to the results described, which were so disgraceful that even the least rigid, who did not assist at these orgies, cried out "Shame!"

The abuse of the baquet put Mesmer upon his mettle to discover some other means of magnetic application, which, with equal effect upon the imagination, should not lead to similar results. In the course of his experiments, he stumbled upon a fact of which, had science been sufficiently advanced, he might have made a more important use than any of his followers have yet done,—he discovered that, by the simple action of the hand, he could command the very effects of the tractors and the baquet, and with greater certainty; and that he could further produce, which neither of the other means enabled him to do, a sensible action of some unknown kind upon patients who were unconscious of being magnetised. Though nothing important has yet resulted from this discovery, it immediately reduced animal magnetism to the means of application since used by all modern magnetisers.

Though without knowledge, Mesmer was what is termed a "learned man." He had pursued the line of study adopted by the physicians of that period, and the results of which left the medical science in a very unsatisfactory condition. His medical oracles were, of course, Hippocrates and Galen. He was filled with the lore of antiquity, and with the ponderous medical reading of the day; but he was no better, as a practitioner, than the doctors so keenly satirised by Le Sage in Gil Blas;—the satire of this author furnishing, in truth, no very exaggerated picture of the medical science derived, in his day, and even in Mesmer's, from the different faculties established throughout Europe. Human physiology was scarcely known as a science in the time of Mesmer; it had made but little comparative progress since the discovery of the circulation of the blood, nearly a century and a half before. The parent of animal magnetism had not therefore sufficient science to investigate a fact which accident had revealed to him, that, by the operation of the hands, accompanied by volition, he could communicate a much more powerful "magnetic" sensation than by metallic tractors, or the magnetised water of the baquet. He was content to let this fact minister to his empiricism, with which, however, some crude realities were mingled. He had obtained a glimpse of the true light; but it was only a glimpse, and it disappeared ere he could read and learn what it might have shown him, had he been qualified to receive the truth.

Among other effects perceived in the course of his practice, Mesmer found, that, by the application of magnetism with the hands, he could make particular persons sleep even under acute pain. When this action was found to exist in particular idiosyncrasies, it was taken advantage of to assuage the exacerbation of painful disease; and many patients afflicted with inflammation, chronic rheumatism, gout, and other painful disorders, are said to have derived relief from the sleep thus induced. Such was the state of animal magnetism at the period of Mesmer's death.

When this event took place, the influence of Mesmerism had been for some time declining. It was, however, reserved for one of Mesmer's disciples, and, though not a physician, certainly Mesmer's successor, to give a new impetus to animal magnetism by the commencement of a series of absurdities, practised by fools, fanatics, and impostors, and at last brought to this country, lodged in the North London Hospital, there to exhibit a conscientious, learned, and skilful physician, believing in all these psychological wonders and modern miracles, for the propagation of which the name of animal magnetism has been prostituted.

During the life of Mesmer, several of the French nobles had been initiated, under his instructions, into the mysteries of animal magnetism. Among the most enthusiastic of his disciples was the Marquis de Puységur, a young nobleman, who had just inherited extensive patrimonial possessions. He had assiduously followed the instructions of his master, and had acquired considerable skill in the use of manual magnetism. After the death of Mesmer, the Marquis de Puységur resided on his hereditary domains in the south of France, where he practised animal magnetism upon his own peasantry. Each evening, from spring to autumn, his vassals assembled under a large linden-tree near

* Dr Hahnemann's assertion, that Peruvian bark, when taken by persons in health, produces intermittent fever, is certainly not true. We have administered this bark in every possible form; we have taken it ourselves; we have also tried its alkaline products, quinina and cinchonina, and the various salts which they severally form, but have never been able to produce a case of ague. Like every other stimulating medicine, bark causes disturbance of the system; but it acts in different ways upon different idiosyncrasies. In ourselves, and some others, it produced catharsis; in others, costiveness and inflammatory action; in some, nausea and sickness; in all, a species of febrile excitement; but in no one instance was the result intermittent fever. We can further state, that not one among the numerous medical men with whom we are acquainted, has ever found a case of such disease being produced by the use of bark; and we defy even any homœopathic practitioner to adduce an instance properly authenticated.

† Hotel, in France, sometimes signifies a nobleman's palace.

the marquis's residence. M. de Puységur, who had been educated in the country, was untainted with the profligacy that disgraced his order. He was a kind-hearted, benevolent man, and his feudal rule was light and paternal. He was therefore much beloved, and every peasant on his estate became eager to afford him the best opportunities of gratifying his desire. In the course of time these simple-minded rustics became sincere converts to the Mesmerian faith.

The fame of the Marquis de Puységur teaching the Mesmerian philosophy under the shade of his linden-tree, brought numerous visitors to the scene; and the whole population of that part of the country would, each fine evening, converge to the linden-tree as a centre. There was, thus, no lack of subjects for magnetic experiment, which was carried to a very great extent, but accompanied with a determined spirit of mysticism and superstition, which marred all true philosophic inquiry. M. de Puységur, besides being generally uninformed, was weak-minded and credulous, and therefore easily induced to confound the natural with the imagined supernatural, and to consider as psychological effects the mere workings and modifications of organised matter, exposed, perhaps, to some unknown chemical agency.

The power of inducing magnetic sleep, discovered by Mesmer, was made the principal ground-work of M. de Puységur's experiments. In pursuing these, he found that he could cause sleep in some individuals, whilst his own magnetic efforts upon other individuals brought sleep upon himself. Hence, he inferred, that in the interchange of the magnetic principle, now termed the "magnetic fluid," between the magnetiser and the person magnetised, the physically weaker individual was the receiver, and the stronger individual the giver; that the party in whom sleep was brought on, possessing naturally less of the magnetic principle than the other, had received a portion which produced that effect. It therefore followed that, to obtain the proper magnetic result, the operator should be the stronger party, otherwise the operation would be reversed. The magnetiser, having more of the magnetic principle than the patient, was therefore considered able to impart to the latter an excess sufficient to cause a pressure upon the brain adequate for the production of magnetic sleep. These inferences, drawn by M. de Puységur and others who co-operated with him, led, at last, to the following conclusions, which have, ever since, been entertained by magnetisers:—I. That the operator should possess not only considerable muscular, but also great nervous power; phlegmatics, even though muscular, being bad magnetisers. II. That he should be in the most perfect bodily health, free from mental excitement, and from all action of the brain, that might distract his attention, or in any wise interfere with the magnetic volition. III. That he should be of energetic temperament, kept under perfect discipline, and free from any outbreaks that might alarm the patient, towards whom the utmost blandness of manner is requisite. IV. That when about to magnetise, he should never expose himself to any loss of animal heat, as this would impede his power of transmitting the magnetic principle.

The greatest discovery of all was still to come; and some years elapsed ere an effect of magnetism was brought to light, by which thousands of wise men have been deluded, and upon which all the absurdities of spiritual or psychological magnetism have since been founded, even to the late display at the North London Hospital.

Many of M. de Puységur's assistants in his magnetic experiments, who underwent magnetic sleep, were observed to talk during their slumbers, and even to give rational replies to questions asked them by the magnetiser. This faculty seemed more common in young girls than among any other class of individuals. The discovery of this effect produced a new era in the art. Though the Marquis de Puységur has since become an author, he was, as we have already observed, as ignorant, at that time, as most of the young nobles of his day. He was at first embarrassed to find a name for the faculty of talking displayed by magnetised sleepers. Having, however, heard sleep-walkers denominated "somnambulists," and as these persons sometimes talk as well as walk, the noble marquis thought that the same name would serve for his sleep-talkers, who did not walk. Instead therefore of calling them "somniloquists," or sleep-talkers, and the faculty they evinced "somniloquism," or sleep-talking, he termed them "somnambulists" or sleep-walkers—although, as we have said, they never walked during sleep – and their faculty, "somnambulism," or sleep-walking. It is rather singular that this name should have been retained by all subsequent magnetisers, not one of whom, including even Dr. Elliotson, has found fault with the term, or replaced it by one more appropriate.

It chanced one day, under the linden-tree, that a girl undergoing the influence of magnetic sleep, being excited to talk by the questions of the noble magnetiser, raved about some imagined internal disease with which she fancied some one present afflicted, and suggested what she stated to be the only mode of cure. The party whom she represented as having the disease, no symptoms of which had ever before appeared, was so struck with the announcement, and his superstitious imagination so excited by it, that he soon complained of internal pain, and took to his bed. Of course the remedy suggested by the magnetised sleeper was immediately applied, and an immediate cure obtained. Here was nothing but a very ordinary effect of imagination upon the physical organs, which, in some instances, has extended so far as to occasion death. M. de Puységur viewed it in quite a different light. In this fact, he saw nothing but a new faculty possessed by magnetised "somnambulists," of examining the interior of the human body, detecting disease, and indicating a remedy for it—a faculty wholly spiritual, and unconnected with the universe of matter. The fame of the detection of this disease and its cure, spread far and wide through the province; and, as the views of the marquis on the subject were no secret, a host of impostors soon appeared, and, by their juggling, the noble disciple of Mesmer was soon convinced of the truth of that which, till then, he had considered only hypothetical: that magnetic sleep imparted to somnambulists the power of detecting and even prescribing for diseases which baffled medical skill. Thus, though the magnetiser had no such faculty himself, he could impart, by his magnetic touch, to somnambulists—who, as already stated, were generally girls—a power of seeing into the human body, understanding the whole of its anatomical action, detecting any defect in the machinery, and pointing out the means of remedying such defect, or else pronouncing the case beyond cure. And surely, as the marquis argued to his friends, this could be no natural effect; because if the covering of the body became invisible so that the somnambulist could see beyond it, or else became transparent, why should not all the internal organs do the same? But this was not the case, for to be properly seen they must remain opaque and retain their colour; and such was certainly the case, for no part of their action escaped the magnetic vision of the somnambulist; therefore, this faculty of the somnambulist must be wholly spiritual, "a communication of souls."

Full of these notions, and of an imagined discovery fraught with such benefit to the human race, the Marquis de Puységur, attended by a couple of somnambulists, proceeded to Paris. In our ensuing Number we shall state the result of his journey.

CLASSICAL EDUCATION.

THERE can be no doubt that a classical education has a great influence in reconciling the mind to the contemplation of idolatry in the abstract, by investing it with the attractions of classic and poetic association; so that the gods and heroes of antiquity become the joint objects of a sort of intellectual homage, and a fondness is contracted for the imagery and language of a superstition not less hideous and baneful, in a moral aspect, than the worship of Sheva or Hanooman. Its character as a false religion, absurd, impious, and demoralizing, is wholly lost in that of a beautiful mythology, which, being viewed only as a philosophical fable, serves to screen the gross system of demonology actually taught and believed in. A delusion, too, is created by the venerable antiquity of these "mythological vanities;" as if, in that distant age, heathenism was an allowable—at least a pardonable—creed, a costume of faith (if we may be allowed the expression) proper to the times and country. It is forgotten that the worship of Jupiter, and Bacchus, and Priapus, was in part contemporaneous with the manifestation of God in the flesh and the preaching of the apostles; and that, in reference to these very gods, St. Paul declares, that "the things which the Gentiles sacrifice, they sacrifice to devils, and not to God." Now, if *any* system or mode of idolatry can be regarded as harmless, or even venerable, it is obvious that a prejudice is created in its favour, which tends to lessen our abhorrence of it under other circumstances. The pleas of antiquity, mythological beauty, and alleged harmlessness, will be admitted in extenuation of systems less graceful, less in accordance with European notions, than that of the Greek pantheon. Or if the enormities of Hindoo demonolatry awaken any indignation or disgust, it will be directed against the modes and accidents of the idolatry, and will not proceed from a just estimate of its essential criminality in any form by which the truth of God is changed into a lie.—*Eclectic Review.*

XUM

PARAGUAY:

ITS SOIL, CLIMATE, AND PRODUCTIONS.

THIRD ARTICLE.

In our last notice of this interesting country, on concluding a sketch of the detestable character of Francia, we intimated our purpose of noticing the personal adventures of the Messrs. Robertson, and giving some account of the soil, climate, and productions of a country whose natural riches have hitherto been turned to so little account. We will now endeavour to redeem our pledge.

Early in the year 1811, Mr. J. P. Robertson, the elder of the two brothers, and then a young man of twenty, freighted a vessel at Buenos Ayres, and sent it up the Parana to Assumption; but as the navigation up the stream is very tedious, two miles an hour against the current being considered a fair average speed, he proceeded by land, and in the course of his journey met with the Guacho Prince Candioti, who was mentioned in our first notice of Paraguay. On his arrival at Assumption, he established himself as a merchant, and being subsequently joined by his brother, Mr. W. P. Robertson, they carried on a very successful business, and were treated with unusual favour by Francia, until the circumstances arose which led that self-willed despot to issue a decree for their banishment.

Business at length called Mr. J. P. Robertson to England, and he prepared to depart, leaving the establishment at Assumption in the care of his brother. He was entrusted with several commissions by Francia, chiefly for the purchase of arms and regimental clothing; but when he waited on him to have his audience of leave, a most singular office was imposed on him, which was no other than that of an envoy from the Dictator, not to the Court of Great Britain, but to the House of Commons, to whom he was charged to express the Dictator's desire of entering into friendly relations with England; and in proof of the benefits that country might derive from an intercourse with Paraguay, he was directed to deliver certain packages of yerba (Paraguay tea), tobacco, and other merchandise, at the bar of the House. Mr. Robertson did his best to conceal his astonishment at this very extraordinary mission, but as he well knew the impossibility of moving the strange man he had to deal with, he was fain to comply. Francia told him he knew very well it was no good to communicate with ministers, but such a message to the House of Commons, would show all England the reality of his intentions, and the advantages he proffered to them. The secret of this apparently very strange attempt, so contrary to all the other parts of his system of isolating his country, was in all probability the ambition which was his ruling passion; and his vanity flattered him with the fond belief that England would snatch greedily at the bait, and aid him with arms, and the force of her powerful name, in pursuing further schemes of aggrandisement, by the subjugation of his neighbours;—schemes which, without such aid, he could not venture to undertake. Fortune favoured Mr. Robertson so far as to spare him the trouble of inventing any method of getting rid of his embarrassing honours, by so ordering it, that his voyage was stopped short at Buenos Ayres.

After an absence of some continuance, Mr. Robertson prepared for his return to Paraguay, which he was obliged to effect by the river, the whole country being in such a disturbed state as to render a land journey impracticable. "The Bandas Oriental," or east side of the River Plate, united under General Artigas, with the pompous title of Most Excellent Lord Protector, bade defiance to all law and order. The protection of this doughty chieftain was of great importance to Mr. Robertson; but, as he was at open war with Buenos Ayres, it could not be procured: but a sailing license from the Honourable Captain Jocelyn Percy, then commanding the British forces in the River Plate, was readily granted, and this Mr. Robertson hoped would be sufficient, especially as Artigas had no vessels on the river.

"Guessing" that Francia would be much vexed that his mission to the House of Commons had not been completed, Mr. Robertson anxiously busied himself with the execution of the other commissions of the Supremo, as he was now called (1815). "Cocked hats, sashes, lace, musical instruments, military clothing, swords, pistols, &c. were all procured and shipped; and, on application to the Buenos Ayres Government, no obstacle was offered to the shipment of a few muskets, and of some munitions of war." But all this led to a very sad result for Mr. Robertson. "The Director Alvear," the chief of Buenos Ayres, "being anxious to initiate a correspondence with Francia, of which the object was to draw recruits from Paraguay, in order to strengthen the legions of the river Plate, I was invited to an audience at the Fort, (or Government House,) for the purpose of being consulted by Alvear as to the probability of Francia's sending men to Buenos Ayres, in return for which, arms and ammunition should be sent to him from thence. I thought the thing very improbable; but stated how impossible it was that I, a neutral and a private individual engaged in commercial pursuits, should agree, in such troublous times, to be charged with such a proposal. At the same time, I suggested that there could be no objection to the Government making such a proposal if it thought proper, by letter, which, if put sealed into the letter-bag of the vessel that was to convey me to Paraguay, should there be delivered to its address. On this suggestion Alvear acted; and a sealed letter, which I never saw, was, with other correspondence, sent from the post-office by order of the Buenos Ayres Government, for conveyance to Francia." Mr. Robertson embarked, and pursued his tedious way up the river, which, from its many tortuous bends, renders navigation difficult even when the wind is fair, and compels the voyagers to work their way by warping with ropes carried a-head by canoes, and made fast to the trees on the banks. They, however, pursued their course without impediment till they reached Santa Fé, when Mr. Robertson's old friend, Candioti, insisted on the delivery of all the muskets. "Señor Don Juan," said he, "self-preservation is the first law of nature, and, in fulfilment of this law, we must here detain your muskets. The ornamental finery we will allow to proceed to its destination, as well as the sabres, because we have plenty of them; but there, take the value of the muskets and ammunition in dollars, and tell his Excellency the Dictator, it is a good sign of the tranquillity of his republic that he has leisure to think so much about music, mathematics, and gold-lace. Here, you know, we are not in a position, at present, to think of anything but the enemy, and our only means of meeting him successfully is by the collection of all the muskets and ball we can possibly procure." This was but the beginning of misfortune, for Mr. Robertson had not proceeded much farther up the river when his vessel was seized one evening, (as, according to custom, it was moored to a tree, and he himself and most of his crew were on shore enjoying the sport of pheasant-shooting,) by a marauding party belonging to the army of Artigas. He was robbed of everything, even to his clothes, and his life was saved only by the intervention of an Indian, one of the band, who afterwards told him he did so only "from the whim of the moment," and he was thrown into the common gaol at the Bajada, whither he was carried by his captors in his own vessel. On his way to the prison he espied coming down the hill an old and faithful servant called Manuel: "I felt," says he, "unspeakable relief, as I was hurried past him by my guards, in being able to say to him these few words,—'Fly to Buenos Ayres, and tell them what you have seen and heard.'

"Onwards I marched, never doubting that I should in the first place be taken to the governor. I was mistaken even in this unenviable supposition. I was marched to the small and wretched gaol appropriated to the reception of murderers, robbers, and other felonious caitiffs of the worst die. There they sat, each upon the skull of a bullock, in chains, in nakedness, in squalid filth, and yet in bestial debauch and revelry. There was a fire lit in the middle of the floor, amid a heap of ashes which had been accumulating apparently for months. Around this fire there were spitted, for the purpose of being roasted, three or four large pieces of black-looking beef, into the parts of which already done, the felons, with voracious strife, were cutting with large gleaming knives. 'Aguardiente,' or bad rum, was handed round in a bullock's horn; and as the fire cast its flickering glare on the swarthy and horrible countenances of the bacchanals, their chains clanking at every motion of their hands or legs, the picture was truly startling. Scarcely had I been introduced, when a yell of horrid welcome was set up by the prisoners. First one and then another pulled me towards the fire; they insisted upon my drinking out of the bullock's horn; and then demanded, with one accord, that I should pay for some more of the same kind of nauseous beverage as they had just finished. I had not a farthing (I cannot say in my pocket, for pocket I had none). 'No matter,' said they, 'the custom is invariable that every new-comer shall treat the older inmates; and, although you should get what we want by the sale of your skin, have it we must and shall.' Without further ceremony, they stripped me of my Artigueño great-coat, and, tattered and wretched as it was, procured in exchange

for it a large flask of spirits. I was now left like many of themselves, naked from the waist upwards, and for *this night* I found it impossible to sleep."

Mr. Robertson was removed to a separate room on the next morning, and he was furnished with clothes by a friend; but eight days elapsed before he was liberated in consequence of the representations of Captain Percy (who had been informed of his capture by Manuel) to Artigas, who affected great indignation at the conduct of his subordinates, and ordered the restoration of the ship and property. The ship and property were rendered up, with the exception of about 1200*l*. This amount was pilfered by the gentlemen in office and their subordinates. Mr. R.'s wardrobe, the arms, the Dictator's finery (as Candioti called it), the clothing for the troops, with such other things as struck the particular fancy of the governor, the captain of the port, serjeants, and others, were detained without scruple. Having despatched the ship on her route to Paraguay, bearing letters to his brother and the Dictator, with a full account of his mishap, Mr. Robertson returned to Buenos Ayres, for the purpose of taking measures for obtaining compensation for his losses from Artigas. Armed with a British protection, he visited this semi-barbarous chief, at his head-quarters at Purificaçion, and was received with great politeness; but he totally failed in the object of his journey. "You see," said the general, with great candour and nonchalance, "how we live here; and it is as much as we can do, in these hard times, to compass beef, aguardiente, and cigars. To pay you 6000 dollars just now, is as much beyond my power as it would be to pay you 60,000 or 600,000. Look here," said he, (and so saying, he lifted up the lid of an old military chest, and pointed to a canvas bag at the bottom of it.) "There," he continued, "is my whole stock of cash; it amounts to 300 dollars; and where the next supply is to come from, I am as little aware as you." This was unanswerable, and Mr. Robertson, finding there was no hope of dollars, took leave of the general, and prepared for his return to Paraguay.

Meantime, the letter written by Alvear to Francia had been published by Artigas, with some comments of his own, in which he asserted that Mr. Robertson had acted as Francia's commissioner, in a plan for selling the Paraguayans to Alvear, and denouncing this treacherous conduct in the most stinging terms. This paper, which was very widely distributed, enraged the Dictator to a furious pitch: he instantly sent to Mr. W. P. Robertson, and, refusing to listen to any justification of his brother, he banished both; allowing Mr. W. P. Robertson two months, to wind up the affairs of his house, but prohibiting Mr. J. P. Robertson from returning to Assumption. Messrs. Robertson accordingly removed to Corrientes, where, and subsequently at Buenos Ayres, they continued to trade successfully, freed from the tyranny and caprice of Francia.

The soil of Paraguay is rich and productive: in fact, it appears to possess more natural advantages, except the possession of minerals, than any other known part of South America. The wood ranks decidedly the first in importance. The lapacho is a magnificent tree; its grain is so close, that neither worm nor rot can assail it. "English oak," says Mr. J. P. Robertson, "is very firm, but never to be compared to lapacho. From the solid trunk of one of these trees, a Portuguese scooped out, at Villa Real, a canoe, which brought down to Assumption a hundred bales of yerba, (that is, 22,500 lbs. of Paraguay tea,) several hides made up into balls and filled with molasses, a load of deals, seventy packages of tobacco, and eight Paraguay sailors, to manage the three masts and sails of the large but yet elegantly scooped-out trunk of the lapacho tree. Of this tree are constructed vessels which, when fifty years old, may still be called young. Their frame is not shaken, nor is their constitution debilitated by all the bumps they have on the sand-banks of the Paraná, nor by the scorching rays of a tropical sun, nor by the 'even-down pours' (as the Scotch have it) of tropical rains. Besides the lapacho, there are the urandig-pitá, the urandig-irai; of which, the latter is equal in durability to rose-wood, and excels it in beauty. Then there is the timbo, the tatayiba (or wild mulberry), the lancewood, the orange-tree, the carandig, the palm-tree, the tataré, and sheraró; all at once useful and ornamental. The cebil and curupaí furnish excellent bark for the purpose of tanning; while many of the shrubs and plants afford dyes of the richest hue. There is one tree, of which the trunk is composed of several stems twisted round one another, yet so compactly as to form the appearance of one solid trunk. There is the palo santo, or holy wood, producing odoriferous gum; and the incense-tree, yielding the delicious perfume of the pastilla. From the manguasi is produced gum elastic, from which matches are made; and the trees, plants, and shrubs of medicinal properties are rich and various. There is one especially worthy of notice: it is called the palo de vivora, or serpent's tree, and the juice of its rind, produced by mastication, is an infallible cure for the poisonous bite of the great original enemy of the human race. Rhubarb and sarsaparilla grow wild all over Paraguay. The cordage of the vessels is there made from a plant which furnishes fibres of so strong and irresistible a texture, as water has not much power to rot, nor the sun much to destroy. The cotton-plant grows in the greatest luxuriance. Tobacco, coffee, sugar, Indian corn, the yucca-root, melons, rice, and especially the pine-apple, are all abundant."

But the staple article of Paraguayan produce is the yerba, or Paraguay tea,—an infusion of which, known as maté, forms the favourite beverage of the inhabitants of South America. The tree grows wild in the forests; and, with an account of the mode in which it is gathered and prepared, we shall take our leave of Paraguay.

"I was invited," says Mr. R., "by one of the great master yerba manufacturers, to sail with him in his smack to Villa Real, and to accompany him by land from thence to the scene of his operations in the woods. Before I describe this, I will give you some account of the men—masters and labourers—by whom the traffic was carried on. It was one of so arduous a nature, that, though very lucrative, it was generally conducted either by young beginners in the world or by low men, who, like miners, having got entangled in a system of gambling, alternately made and lost fortunes, were always poor, and finally died in the yerbalés. Exceptions to this rule there were, but very few. Like their masters, the peons were almost invariably gamblers too: they were, therefore, no sooner out of the woods than they were obliged to return to them. * * * * * * *

"So impenetrable and overrun with brushwood are these forests in many places, and so tenanted in all by reptiles and insects of the most tormenting and often venomous description, that the only animals capable of being driven through them are bulls, which are necessary for the maintenance of the colony of yerba makers, and mules, which are not less necessary for the conveyance out of the woods of the tea, after it is manufactured and packed. With Miguel Carbonell, then, (a very coarse catalán,) who had spent a long life alternately on the river and in the woods, I sailed from Assumption still farther up the stream; and we arrived at Villa Real, in latitude 23° 20′ S., on the tenth day of our mosquito martyrdom on the Paraguay. We were now on the borders of a territory inhabited by the Mbayá and Guaycurú Indians. The latter is the fiercest of all the unsubdued tribes in that quarter. In two days after our arrival we left Villa Real, and never was I more thankful than when we did; for, if the pains and penalties of purgatory be at all equal to those of that place, there certainly cannot be much to fear beyond it. The heat, the effluvia, the filth, the mosquitoes, the lizards, the serpents, the toads, the centipedes, the binchucas, the bats, the naked inhabitants, the wretched huts, the squalid poverty,—all rendered my residence there, for two days, not only painful, but loathsome in the highest degree. Our cavalcade, as we departed, was rather a grotesque one: mounted upon forty mules, rode by as many peons, with no covering but a shirt, a pair of drawers, a girdle round their waist, and a red cap on their head. Some of the mules were saddled, some not. Before us went a dozen sumpter mules, laden with barrels of spirits, tobacco, and other merchandise. Half-a-dozen of the peons, a little way a-head, drove upwards of a hundred bulls, bellowing under the smart inflicted by stinging insects; while the catalán, a capataz (or overseer), and myself, brought up the rear. Our legs were cased in raw hide, to defend us at once from the thorns of the underwood and from the bites of the mosquitoes. Our faces, with the same object, were vizored in tanned sheepskin, and our hands were fitted with gloves of the same material. The peons, it appeared to me, had their own hides so tanned and hardened as to require no better protection from the insects."

On the fifth day they reached a yerbal, or forest of the yerba-tree, and active preparations were immediately made for a six-months' settlement.

"At dawn of day the peons were at work. Here, one little band was constructing for our habitation a long line of wigwams, and overlaying them with the broad leaves of the palm-tree and of the banana. There, other sets were making preparations for the manufacturing and storing of the yerba. These preparations con-

sisted, first, in the construction of the *tatacúa*. This was a small space of ground, about six feet square, of which the soil was beaten down by heavy mallets, till it became a hard and consistent foundation. At the four corners of this space, and at right angles, were driven in four very strong stakes, while upon the surface of it were laid large logs of wood. This was the place at which the leaves and small sprigs of the yerba tree, when brought from the woods, were first scorched, fire being set to the logs of wood within it. By the side of the *tatacúa* was spread an ample square of hide-work; of which, after the scorched leaves were laid upon it, a peon gathered up the four corners, and proceeded with his burthen on his shoulder to the *second* place constructed,—viz. the *barbacúa*. This was an arch of considerable span, and of which the support consisted of three strong trestles. The centre trestle formed the highest part of the arch. Over this superstructure were laid cross bars, strongly nailed to stakes on either side of the central supports, and so formed the roof of the arch. The leaves being separated, after the *tatacúa* process, from the grosser boughs of the yerba tree, were laid on this roof, under which a large fire was kindled. Of this fire the flames ascended, and still further scorched the leaves of the yerba. The two peons beneath the arch, with long poles, took care, as far as they could, that no ignition should take place; and, in order to extinguish this when it did occur, another peon was stationed at the top of the arch. Along both sides of this there were two deal planks; and, with a long stick in his hand, the peon ran along these planks, and instantly extinguished any incipient sparks of fire that appeared. When the yerba was thoroughly scorched, the fire was swept from under the *barbacúa* or arch; the ground was then swept, and pounded with heavy mallets, into the hardest and smoothest substance. The scorched leaves and very small twigs were then thrown down from the roof of the arch, and, by means of a rude wooden mill, ground to powder. The yerba, or tea, was now ready for use; and being conveyed to a large shed, previously erected for the purpose, was there received, weighed, and stored by the overseer. The peons worked in couples, except that they hired a third peon, and paid him accordingly, to aid them in superintending the operations of the *barbacúa*. These two peons got a receipt for every portion of tea which they delivered to the overseer; and they were paid for it at the end of their stipulated sojourn in the woods, at the rate of two rials, or a shilling, for the arrobe of twenty-five pounds. The next and last process, and the most laborious of all, was that of *packing* the tea. This was done by first sewing together, in a square form, the half of a bull's hide, which, being still damp, was fastened by two of its corners to two strong trestles driven far into the ground. The packer, then, with an enormous stick made of the heaviest wood, and having a huge block at one end, and a pyramidal piece, to give it a greater impulse, at the other, pressed, by repeated effort, the yerba into the hide-sack, till he got it full to the brim. It then contained from two hundred to two hundred and twenty pounds, and being sewed up, and left to tighten over the contents as the hide dried, at the end of a couple of days, by exposure to the sun, a substance as hard as a stone, and almost as weighty and impervious too.

* * *

"After all the preparations which I have detailed were completed (and it required only three days to finish them), the peons sallied forth from the yerba colony by couples. I accompanied two of the stoutest and best of them. They had with them no other weapon than a small axe; no other clothing than a girdle round their waist, and a red cap on their head; no other provision than a cigar, and a cow's horn filled with water; and they were animated by no other hope or desire, that I could perceive, than those of soon discovering a part of the wood thickly studded with the yerba tree. They also desired to find it as near as possible to the colonial encampment, in order that the labour of carrying the rough branches to the scene of operations might be as much as possible diminished. We had scarcely skirted for a quarter of a mile the woods which shut in the valley where we were bivouacked, when we came upon numerous clumps of the yerba tree. It was of all sizes, from that of the shrub to that of the full grown orange-tree; the leaves of it were very like those of that beautiful production. The smaller the plant, the better is the tea which is taken from it considered to be. To work with their hatchets went the peons; and in less than a couple of hours they had gathered a mountain of branches, and piled them up in the form of a hay-stack. Both of them then filled their large ponchos with the coveted article of commerce in its raw state; and they marched off with their respective loads.

"When I returned to the colony, I found the peons coming by two and two, from every part of the valley, all laden in the same way. There were twenty *tatacúas*, twenty *barbacúas*, and twenty piles of the yerba cut and ready for manufacture. Two days after that, the whole colony was in a blaze. *Tatacúas* and *barbacúas* were enveloped in smoke; on the third day, all was stowed away in the shed; and on the fourth, the peons again went out to procure more of the boughs and leaves. During the eight days that I witnessed these operations, I was profoundly struck with the patient and laborious perseverance of the workmen. Then, for their abstemiousness, it was, if possible, still more striking. Beef dried in the sun, and a few water-melons, constituted their whole fare, with, at the close of day, a cigar and a glass of spirits. Neither the perpendicular rays of the sun, nor the everlasting attacks of insects and reptiles, had the power of producing an intermission of labour, or of damping merriment after the toils of the day were brought to a close."

PRESENT STATE OF THE SLAVE TRADE.

"IT is melancholy to reflect, that the efforts which we have so long and so perseveringly made for the abolition of the Slave-trade, *should not only have been attended with complete failure, but with an increase of Negro mortality.* Millions of money and multitudes of lives have been sacrificed; and in return for all, we have only the afflicting conviction that the Slave-trade is as far as ever from being suppressed. Nay, I am afraid the fact is not to be disputed, that while we have thus been endeavouring to extinguish the traffic, it has actually doubled in amount.

"Twice as many human beings are now its victims as when Wilberforce and Clarkson entered upon their noble task; and each individual of the increased number, in addition to the horrors which were endured in former times, has to suffer from being cribbed up in a narrower space, and on board a vessel where accommodation is sacrificed to speed. Painful as this is, it becomes still more distressing if it shall appear that our present system has not failed by mischance, from want of energy, or from want of expenditure, but *that the system itself is erroneous, and must necessarily be attended with disappointment.*

"Hitherto we have effected no other change than a change in the flag under which the trade is carried on. It was stated by our Ambassador at Paris, to the French Minister, in 1824, (I speak from memory,) that the French flag covered the villains of all nations. For some years afterwards the Spanish flag was generally used. Now, Portugal sells her flag, and the greater part of the trade is carried on under it. Her governors openly sell, at a fixed price, the use of Portuguese papers and flag."

It has been proposed to declare the trade piracy: but even if all nations were to accede to such a declaration, Mr. Buxton declares it must fail.

"But now I will make a supposition still more Utopian than any of the preceding. All nations shall have acceded to the Spanish Treaty, and that treaty shall be rendered more effective. They shall have linked to it the article of piracy; the whole shall have been clenched by the cordial concurrence of the authorities at home and the populace in the colonies. With all this, we shall be once more defeated and baffled by contraband trade.

"The power which will overcome our efforts is the extraordinary profit of the slave-trader. It is, I believe, an axiom at the Custom-house, that no illicit trade can be suppressed, where the profits exceed 30 per cent.

"I will prove that the profits of the slave-trader are nearly five times that amount. "Of the enormous profits of the Slave-trade," says Commissioner Macleay, "the most correct idea will be formed by taking an example. The last vessel condemned by the Mixed Commission was the 'Firm.'" He gives the cost of

	Dollars.
Her cargo	28,000
Provisions, ammunition, wear and tear, &c.	10,600
Wages	13,400
Total expense	52,000
Total product	145,000

"There was a clear profit on the human cargo of this vessel of 18,640*l.*, or just 180 per cent.; and will any one who knows the state of Cuba and Brazil pretend that this is not enough to shut the mouth of the informer, to arrest the arm of the police, to blind the eyes of the magistrates, and to open the doors of the prison?"—*Buxton's African Slave Trade.*

THE THREE COLONIES OF AUSTRALIA.

THE reader is aware that the large island of Australia is colonised on three portions of its coast:—New South Wales, on the eastern side; Western Australia, or the settlement of Swan River, on the western side; and the new experimental colony of South Australia, on the southern coast.

Of New South Wales it is scarcely necessary to say anything. It was selected, in 1787, as a place of transportation: the first fleet with convicts sailed in that year, and anchored in Port Jackson on the 25th of January, 1788. The convict settlers endured for some years great privations, from the want of provisions, while their difficulties were aggravated by the bad conduct of the convicts themselves, who, turbulent at all times, were exceedingly hard to manage in the infancy of the colony; but at last, after an interval of half a century, in spite of much bad management and many obstructions,—in spite of the depraved character of the greater portion of the colonists,—this penal colony has become a very flourishing settlement, and will probably continue to advance. But it is not adapted for a dense population. "The present limits of the New South Wales territory extend coastwise from about the thirty-second to the thirty-fourth degree of south latitude, with a breadth not exceeding two hundred miles. The portion within which land might be selected, was fixed, in 1829, at 34,505 square miles, or about 23,000,000 of acres; of which, Major Mitchell states, only 4,400,000 acres have been found worth having, whilst the owners of this appropriated land have been obliged to send their cattle beyond the limits, for the sake of pasturage. The soil is good only where trap, limestone, or granite rocks occur; but, unfortunately, sandstone predominates so much as to cover about six-sevenths of the whole surface of the territory, and there the soil is merely a barren sand, without turf, and the trees subject to conflagrations, which leave behind them little vegetable matter. The want of water and of moisture render the country unfit for agriculture, and, until a well-arranged system of roads can be effected, there will be serious impediments in the way of communication between the isolated spots of a better description.

"The unproductiveness, upon the whole, of the present colony induces Major Mitchell to recommend its extension, together with the formation of additional lines of communication. He proposes that New South Wales should thus be made to reach northward to the tropic of Capricorn, westward to the 145th degree of east longitude; the southern portion having for boundaries the Darling, the Murray, and the sea-coast. Even, however, of this extended territory, one fourth part only is stated to be available for pasturage or cultivation; one third consisting of desert plains, and the remainder of rocky mountains and impassable tracts."

"It had long been wished," says Mr. Butler, in his "Handbook for Australian Emigrants," "that the western coast of Australia should be occupied by Great Britain: the fine colony we had succeeded in establishing on the eastern coast, under the most adverse circumstances, was a stimulus to the undertaking; and the favourable report of Captain Stirling, R.N., who explored the coast in H.M.S. Success, led, in 1829, to a proposition, on the part of Thomas Peel, esq., Sir Francis Vincent, E. W. Schenley, T. P. Macqueen, esqrs., and other gentlemen, to promote the views of government in founding a colony, to aid the mother-country. These gentlemen offered to provide shipping to carry ten thousand British subjects (within four years) from the United Kingdom to the Swan River,—to furnish provisions and every other necessary,—and to have three small vessels running to and from Sydney, as occasion might require. They estimated the cost of conveying these emigrants at 30*l.* each, making a total of 300,000*l.*; and they required, in return, that an equivalent should be granted them in land equal to that amount, and at the rate of 1*s.* 6*d.* per acre, making four million acres; out of which they engaged to provide every male emigrant with no less than two hundred acres of land, free of all rent.

"This arrangement was not carried into effect, and a project for the formation of the new colony (without making it a penal settlement) was issued from the Colonial Office in 1829.

"By this project, his Majesty's government did not intend to incur any expense in conveying settlers to the new colony on the Swan River, nor to supply them with provisions or other necessaries, after arrival there.

"Captain Stirling was appointed lieutenant-governor of the intended settlement, with a grant of 100,000 acres; and Mr. Peel was to receive 250,000 acres, on condition of taking out 400 emigrants, with liberty to extend the grant to one million acres, previous to the year 1840, by receiving forty acres for every child above three years, eighty for every child above six; up to ten years 120, and exceeding that age and upwards 200 acres, for each person conveyed to the colony. The terms requisite to obtain 500,000 acres having been complied with, early in 1829, a number of settlers left England for Swan River, where they began to arrive in August, and to locate themselves along the banks of the Swan and Canning rivers, so that by the end of that year there were in the new colony, residents 850; non-residents, 440; value of property, giving claims to grants of land, 41,550*l.*; lands actually allotted, 525,000 acres; locations actually effected, 39;—number of cattle, 204; of horses, 57; of sheep, 1096; of hogs, 106; and twenty-five ships had arrived at the settlement between the months of June and December. Such was the commencement of our new colony on the shores of Western Australia. The settlers met at first (as must be expected in all new countries) with many difficulties, and great hardships had to be surmounted: the land near the coast was found poor and sandy, but subsequently, on exploring the interior, fine pastoral and agricultural tracts were discovered. A portion of the settlers have been located at King George's Sound (latitude 35° 6′ 20″ S., longitude 118° 1′ E.), near the south-west extremity of Australia."

Lavish grants of land nearly caused the ruin of the colony of Western Australia. The colonists were dispersed; land was indeed procured in abundance, but labourers to cultivate the land were procured with great difficulty; capital was wasted, and hopes, which were raised extravagantly high, were crushed; and for a year or two the name of Swan River was a bugbear to emigration. The colony begins to hold up its head, though still struggling with the difficulties arising out of the original errors and mismanagement of its settlement. In the "Colonial Gazette," we remark an extract from a letter dated June 1st, 1838, York, Western Australia, in which the writer says,—"I am happy to say that our prospects generally have been much improved, but we want settlers and labourers very much: the price of labour now is ruinously high. Shepherds particularly are wanted: they are getting as much as 40*l.* a-year, besides provisions."

Another letter, dated Swan River, August 28th, 1838, states, that "The colony is in a satisfactory condition, and steadily advancing; stock is increasing, money plentiful, and, though wages are high, and we happen to be short of supplies just now, confidence in the future success of the colony never was so high as at present. All we want is a moderate influx of new settlers, especially agricultural labourers, to bring out the capital which remains unemployed in the colony."

A new plan of colonisation was proposed by Mr. E. G. Wakefield, in a book called "England and America," a very clever book, but not to be depended on in *all* its statements and opinions, which are exaggerated, and strained at times to meet the writer's views. His book, however, made a very great impression on the public mind; and a society was formed, to get up a colony, to be managed on the principle laid down in "England and America," which was held to be the great *secret* of colonisation. This principle consists in the just combination and proportion of *capital* and *labour*. It was contended that where land was easily procured, there was a natural tendency in man to appropriate as much of it as he could; thus a vast extent of country might be in the hands of individuals who were too few in number to cultivate it themselves, and were without the means of procuring labourers to render their possessions productive—that is, to render them worth the keeping. Moreover, wherever people were scattered over large tracts, there was no *market* for labour—no productive energy—nothing of that combination and concentration which, by stimulating industry, render it re-productive.

An act of parliament was passed in 1834, erecting a certain portion of South Australia into a province, to be colonised on the new principle. No land was to be given away; it was all to be bought and paid for, at a price which was to be *sufficient*, and, in order to provide *labour* to cultivate this land, the purchase money was to be appropriated to carrying out emigrants, who, being unable to procure land themselves, would be obliged to work for wages. The following are the avowed principles on which the colony is established and managed:—

"I. The characteristic feature of the plan of colonisation laid down by the act of parliament is a certain means for securing a sufficient supply of free labour.

"II. This is accomplished by requiring every applicant for colonial land, in order to entitle himself to a grant, to pay a certain sum per acre to a general fund to be employed in carrying out labourers.

XUM

"III. The emigration fund thus raised is placed under the management of the commissioners; whose duty it is to regulate the rate of payment, so as to obtain neither too large nor too small a number of labourers; and by the selection of young, healthy persons, of good character and of both sexes, in equal numbers, to render the fund as efficient for the purposes of the colony as possible.

"IV. This arrangement secures many very important advantages.—First: having provided a sufficient supply of *free* labour, the act of parliament declares that no *convicts* shall be sent to the settlement, and thus the colonists are protected from the enormous evils which result from the immorality and profligacy unavoidable in a penal settlement. Secondly: As the labourers will be carried out at the common cost of the landowners by means of the emigration fund, and as they will be sufficiently numerous, it is not necessary that they should be *indentured* to any one. Both employers and labourers will be perfectly free to enter into any arrangements which may be mutually agreed upon, a state of things which experience has shown to be much more conducive to contentment and prosperity than any other. Thirdly: The contribution to the emigration fund being a necessary preliminary to the acquisition of land, labourers taken out cost free, before becoming landowners, and thus ceasing to work for others, will furnish the means of carrying out other labourers to supply their places. This arrangement, the fairness of which must be obvious to every one, is really beneficial, not only to those who are landowners in the first instance, but to those also who may become such by a course of industry and frugality; for, while it diminishes the injurious facility with which, in most new colonies, a person with scarcely any capital can become a petty landowner or *cottier*—a temptation which few have sufficient strength of mind to resist, notwithstanding the state is one of incessant care and toil—it holds out a prospect of real independence and comfort to those who will patiently wait the very few years which are necessary to enable any one, with colonial wages, to acquire sufficient capital to purchase land and become a master. Fourthly: As those who will cultivate their land, and thus require many labourers, will contribute no more to the emigration fund than those who may leave it waste, the non-cultivation of extensive appropriated districts—one of the chief obstacles to the progress of every colony hitherto established—will be greatly discouraged, if not altogether prevented."

In 1835, the South Australian commissioners advertised land for sale in the new colony, at £1 per acre: but sales being effected slowly at this rate, and a company having proposed to take a large quantity, if given to them at 12s. per acre, the price was reduced. When a sufficient quantity was sold at this rate, so as to raise the fund required by the act of parliament, the price was again raised to £1 per acre, at which price it continues to be sold in sections.

The first ship sailed for South Australia on the 24th March, 1836, carrying out the officers of the surveying staff, and other official persons; and, in May following, the surveyor-general, Colonel Light, went out in the brig Rapid, which had been purchased by the commissioners as a surveying vessel.

The site for the capital having been chosen, the survey for it was completed early in 1837; and the preliminary arrangements having been completed, the first court of gaol delivery was held at Adelaide on the 13th of May, before the late Sir J. W. Jeffcott; and on the 23rd of the same month the streets and squares of the new town were named. By this month (May, 1837) sixteen vessels had arrived from England, carrying out upwards of a thousand individuals, together with supplies of provisions, stores, &c. Altogether, the number of vessels which have sailed from this country for South Australia is as follows, viz.:—

For the year 1836	. 15 vessels, about	. 4,577	tons register.
1837	. 13	. 4,424	———
To 26th Nov. 1838	. 36	12,834	———

Several vessels have sailed during the present spring.

[*To be continued.*]

CHANGE OF THE TIMES.

AN old farmer, who lives by the Hampshire hills, observed lately, when talking about the corruption and degeneracy of the times, that it was the fine words and the flattery of men to the farmers' wives that had done all the mischief. "For," said he, "when it was *dame* and *porridge*, 'twas real good times; when 'twas *mistress* and *broth*, 'twas worse a great deal; but when it came to be *ma'am* and *soup*, 'twas very bad.—*Newspaper.*

A CURE FOR DYSPEPSIA.

THERE are few beings in the world that are not united by some bonds of relationship; if they have neither brothers, sisters, or still nearer ties, they have generally a great uncle, or a far off cousin, that occasionally sends them an inquiring letter. Such, however, is not my case; I stand alone in the world. How I came to be so is no part of my present narrative; the wounds that time has closed, I have no desire to tear open. I have heard wise people say, the blessings of life are equalized; perhaps they would have pointed to my lot as an exemplification: they might have said, 'Look at his plantation, his negroes, his immense crops, his groves of orange trees.' 'Go into the city; see his house with its verandas, his luxuriant garden, his stud of horses! but after all, poor man, he is to be pitied, he is alone in the world, he has no health to enjoy anything.' Such was the superficial survey. Alas! they knew not, like me, the weary wasting regrets that pressed on my heart, the recollections that neither religion nor philosophy could banish. All that was fair and beautiful added to the keenness of my sensations, and I found solitude and silence most conducive to my comfort. No one broke in upon my retirement. It is an easy art to live alone. For years I scarcely spoke to a human being; my slaves learnt to communicate with me by signs, and the little negroes, for I am not hard-hearted, minded my presence no more than they did one of my palmettos. My ill health daily increased; my nights were sleepless; I consulted physicians: some said my complaints were pulmonary, others that they were dyspeptic; all prescribed, but none benefited.

I was one evening sitting in my veranda and anticipating the miserable nights I was to pass as one succeeded another, when one of my servants entered and said, 'Here is a little girl want very much to see Masser.' I felt some sensation of surprise, but said, 'Let her come.' A girl approached, about fourteen years old; she held in her hand a little basket of flowers, and seemed doubtful whether to come nearer or not. At length I said, 'Do you want anything?' 'I have brought the gentleman some flowers,' said she, 'if he will take them.' There was an expression in the child's countenance, that bordered on compassion; her voice, too, was soft and sympathetic. 'I thank you, my dear,' said I, 'put down the flowers; I will take yours, and you may fill your basket with some of mine.' 'Won't you keep the basket, Sir?' said she; 'I made it myself.' I took it in my hand and examined it; it was composed of small crystals, that sparkled in the setting sun, and beautifully contrasted with the rich purple and crimson flowers that hung over it. I took out a piece of money and offered her; she thanked me, but refused to take it, and said she did not bring her basket for sale.

'Where do you live, my dear?' said I. 'There,' said she, pointing to a little narrow building, the upper window of which overlooked my garden. 'You have seen me in my garden?' said I. 'Yes,' replied she, 'and I heard the gentleman was sick, and I thought,'—she hesitated and coloured,—'I might help him.' 'Then you are a doctress,' said I, smiling. 'No, Sir,' replied she, 'I am not one, but Sook is.' 'Who is Sook?' said I. 'She is an Indian woman, that can cure everything, all sorts of disorders.' 'She cannot cure mine,' said I, involuntarily. 'O yes, Sir, she can,' said the girl, 'I have got a cure in my basket; will you please to try it?' and she turned over her flowers, and took out a little square packet, with some figures wrought in Indian characters. 'This is it, Sir,' said she. 'I went to her yesterday and got it on purpose for your complaint.' 'But what did you tell her was my complaint?' 'I told her,' said she, with an air of confidence, 'that it was an indigestion of the heart.' The girl is right, thought I; she is more skilful than all the physicians. 'Well, what am I to do with your packet? Swallow it?' And I made a sound nearer a laugh than I had done for years. 'O dear, no, Sir; you are to hang it round your neck and let it cover your heart; Sook says you have the cold disorder in the heart, and this will cure it; may I leave it, Sir?' said she. I could not refuse, indeed I felt some curiosity to know more about the girl. 'You may leave it to-night,' said I. She made a low curtsey and left me.

The next day she did not sue for admittance, nor the next after that; but the third day she came. There was the same gentle, innocent expression of countenance, as she inquired after the success of her prescription. When I told her I had not tried it, her disappointment was too apparent to be feigned, and I said, 'You shall not lose the profit of your prescription,' and I handed her a bill; it was five dollars. 'That will do, I suppose,' said I. She took it and looked at it. 'O Sir,' said she, 'Sook does not ask anything if it don't cure you, and only a dollar if it

does.' 'And what do you charge?' said I, a little scornfully. 'Nothing, Sir,' replied she eagerly, 'nothing at all.' 'Come, be honest,' said I, 'tell me your motive.' The girl did not seem to understand me. When I explained myself, she said, 'I want nothing, nothing, Sir; I live with my mother, she is a widow: we are very happy, so happy,' added she, 'that I could not bear to see anybody looking so sick and sad as you do, and I told Sook about the gentleman, and she said she could cure him.'

This was the beginning of my acquaintance with Amie, for so she was called: I was at length persuaded to try the remedy; it certainly did me no harm, and it produced a pungent sensation upon the skin that almost amounted to a blister, and possibly might have done good. I think, from some cause or other, I grew a little better. Amie used to come every day, and often brought me some little delicacy. I had gone the round of suspicion; at first I conceived it was for money she had made my acquaintance; then I thought, possibly, young as she was, and old as I was, for there was certainly thirty years' difference in our ages, it might be for love; but after three years' experience, I became convinced she had no motive under heaven but the desire of serving a fellow-creature. One day Amie came to me with a sorrowful look. 'I shall not see you much longer,' said she, 'I am going away.' 'Where?' asked I. 'To Alabama,' she replied. 'What in the name of heaven carries you to Alabama?' exclaimed I; 'Are you going to be married?' 'No,' said she, 'but my mother is, and she is going to Alabama with her new husband.' 'And takes you?' 'Yes, Sir.' 'Poor child!' I involuntarily exclaimed; 'do you want to go?' She hung her head, and I saw a few tears hastily brushed away. 'It is a wild uncultivated country,' said I. 'Yes, Sir, that is the reason my father-in-law is going; he has worn out his land here, and he can purchase a hundred acres there for fifty dollars.' 'But it is good for nothing.' 'Indeed, Sir, you are mistaken,' replied she, 'it is the best of land; he will have nothing to do but cut down the trees, build a log house, and plant corn or cotton, just as he pleases, and it will grow of itself.'

After Amie's departure I remained solitary as usual, nobody near me. I ought to except a young lad that I had sometimes employed in writing; he was an intelligent, well-behaved boy, and lived near; I transferred, in a degree, my kindness for Amie to him, for he in some measure supplied her place; but who that has experienced the attentions of a gentle, kind-hearted woman, can feel compensated for their loss, by the awkward attempts of one of his own sex. I grew more and more sick; the spring and summer wore heavily away; I thought continually of my last interview with Amie; of her evident emotion and embarrassment when I asked her if there was nobody she loved as well as her mother. My first idea returned with redoubled conviction. I cannot doubt it, thought I; strange as it is, she loves me, she has loved me from the first!

At length I determined to seek her, and I asked Theodore if he was willing to go with me on horseback; he eagerly embraced the proposal. I pass over all the difficulties and misgivings of my mind, how often I relinquished the plan and then resumed it again; at last, however, Theodore and myself were on our way; we travelled south. Theodore I found a pleasant companion, he often made me laugh heartily; and, generally speaking, my health was not worse than when I left home; he was very attentive to my accommodation; and though I had many hardships to endure, I was saved from actual suffering by his constant and persevering efforts.

After many wanderings, one night, as we proceeded on our journey, after travelling all day through forests scarcely marked by the track of wheels, we came to a log-house; there was all the marks of a new settlement. We dismounted to ask for a night's lodging; a young woman came to the door, with a white handkerchief tied over her head, and fastened under her chin. At one glance I saw it was Amie! Judge of her astonishment; she looked first at me, then at Theodore, and flung herself upon a little wooden bench that stood near, half fainting. As I have said before, I detest egotism; I will not therefore dwell on our meeting; Amie had been sick, and she looked pale and languid; she said the climate agreed better with them all than with her. We were comfortably accommodated. Amie was full of wonder, and repeatedly asked me where we were going, and how we came there. I put her off, however, and merely told her she should know all in the morning. It was a luxury to eat my boiled eggs from a clean table-cloth, and a still greater one to throw myself into a clean bed. Long after I closed my eyes I could hear the faint whispers of Amie's and Theodore's voices. How soothing it was to reflect that the beings I loved best were engaged in talking of me! Theodore, thought I, is giving an account of my sufferings, my hardships, and 'hair-breadth escapes;' Amie is listening. Yes, my mind is made up; I will rescue this fair flower from an untimely fate; I will bear it back, and cherish and watch over it; my devoted kindness shall repay her for the years of secret and heart-consuming tenderness she has lavished upon me. And I actually dropped asleep with those lines of Shakspeare in my head, which need not be repeated; 'she never told her love,' &c.

The next day Amie looked still paler; I had not the heart to let her languish longer in concealment, and I invited her to walk with me; for in these log-houses every sound is communicated from one part to the other. When we reached an old log that made a convenient seat, I sat down, for I was a little out of breath, and I motioned her to sit by me. It was, even for me, an agitating moment, I breathed quicker than usual; she perceived a change, and was alarmed; 'Let me run back,' said she, 'and get some of your *restorative drops*.' 'No, no,' said I, 'Amie, you are my *restorative*, the drop of happiness in my cup.' She gave me a sweet smile and kissed my hand. 'Ah, Amie,' said I, 'I have found out your secret, and it was for your sake alone I have come this long way. Foolish girl,' said I, drawing her towards me, 'why did you not tell me you were in love, it would have saved us both this long journey.' Her blushes grew deeper and deeper; I really pitied her, and thought it best to finish the scene. 'Come, confess,' said I. 'There is no need of confessing,' said she, half playfully, half bashfully, 'if you have found me out.' There was something so bewitching in her manner, that I really began to feel 'love's young dream' stealing over me. 'Well, well,' said I, 'I will send Theodore to the nearest town for a parson; we will have the ceremony performed, and all return together.' She seemed wholly overpowered. 'You are too, too kind,' exclaimed she, 'how shall I repay such goodness! It shall be the occupation of my life to make yours happy! and Theodore, too, what will he say! let me go and tell him this joyful news.' Before I could speak, she was off. I confess I thought, considering her previous silence and reserve, she was a little forward in communicating the matter; that it would have been as well to have left it to me; but I made every allowance for the intoxication of happiness; in a few moments I saw them returning, arm in arm. 'I have brought Theodore to thank you for himself,' said Amie, as they approached. 'Indeed,' said Theodore, modestly looking down, 'I have no words to do it; how little I imagined what were your intentions; and that it was to make us happy you were enduring all this hardship!' 'And how little,' interrupted Amie, 'did we suspect that our secret was known!' I was perfectly astonished; my cough became so violent that I thought I should have strangled: the children were really alarmed. When it ceased, Amie again began to express the overflowing of her heart. 'Theodore was the first,' said she, 'that told me how much you suffered, and how good and kind-hearted you were; how you felt for everybody, and tried to do everybody good. I went to Sook and told her your case; I knew she could cure everything, but I little thought what a blessing was to come of it!'

She might have run on for ever, as she seemed inclined to, for I was perfectly bewildered. 'Theodore and I,' continued she, 'have loved each other from children; he always made my pens for me at school, and proved my sums, but when I came away to the Alabama country, I never expected to see him again.' And again she seized hold of my hand, though I really made some resistance, and kissed it. But what signifies all this; egotism is detestable. I will only add, that I had the wisdom to keep my own counsel, and concealed my mistake in the best manner I could. By degrees I grew quite reconciled to the change things had taken, and thought it was for the best. I determined to adopt them as children. Amie returned, Mrs. Theodore Grey. I gave up a useless part of my house, and kept the southern veranda for myself. Little Henry Grey, who is named from me, is sleeping on the sofa by my side; his father is a fine, intelligent, manly fellow; and Amie, Amie, is the joy and comfort of my life, and bids fair to be the prop of my old age. As for my dyspepsia, I really don't know what has become of it, or when it left me; I have not thought of it for months; but I now recollect that it was to recommend Sook's prescription that I began this narrative; whether it would be as successful in all complaints I cannot take it upon me to determine: I can only say, I have found it a complete cure for the dyspepsia.

A CASE FOR THE LAWYERS.

"I heard a tale of a butcher, who was driving two calves over a common that were coupled together by the necks with an oaken wyth (a halter made of oak twigs). In the way where they should pass, lay a poor lean mare, with a galled back, to whom they coming (as chance fell out) one of one side, and the other of the other, smelling on her (as their manner is), the midst of the wyth that was between their necks rubbed her, and grated her on the sore back, that she started and rose up, and hung them both on her back as a beam; which being but a rough plaister to her raw ulcer, she ran away with them (as she were frantic) into the fens, where the butcher could not follow them, and drowned both herself and them in a quagmire. Now the owner of the mare is in law with the butcher for the loss of his mare, and the butcher interchangeably indicts him for his calves."—*Pierce Penilesse, by Thomas Nashe, anno* 1593.—We have searched the books and cannot find any decision on this important case; the point appears to have been again discussed in the yet undecided cause of Bullum *v.* Boatum, reported by Steevens, the renowned lecturer on heads.

EVIL COMMUNICATION CORRUPTS GOOD MANNERS.

"It is easier," says St. Gregory Nazianzen, "to contract the vices of others than to impart to them our own virtue; just as it is easier to catch their diseases than to communicate to them our own good health."

OPINION.

"There cannot," says Locke, "be a more dangerous thing to rely on, than the opinion of others, nor more likely to mislead one; since there is much more falsehood and error among men, than truth and knowledge; and if the opinions and persuasions of others, whom we know and think well of, be a ground of assent, men have reason to be heathens in Japan, Mahometans in Turkey, Papists in Spain, Protestants in England, and Lutherans in Sweden."—*Locke on the Human Understanding.*

THE REFLECTION OF A PRIME MINISTER.

Alas!
Our glories float between the earth and heaven
Like clouds which seem pavilions of the sun,
And are the playthings of the casual wind;
Still, like the cloud which drops on unseen crags
The dews the wild flower feeds on, our ambition
May from its airy height drop gladness down
On unsuspected virtue; and the flower
May bless the cloud *when it hath passed away!*

Bulwer's Richelieu.

COMPARISON OF SAVAGE AND CIVILIZED LIFE.

Coming from an almost desert country, we were struck with the bustle of a town (Augsturn) with only 6000 inhabitants. We admired the conveniences with which commerce and industry furnish civilised life. Humble dwellings appeared to us magnificent; and every person with whom we conversed seemed to be endowed with superior intelligence. Long privations give a value to the smallest enjoyments; and I cannot express the pleasure with which we saw, for the first time, wheaten bread on the governor's table.—*Humboldt.*

PAST AND PRESENT TIMES.

If a man drest as he drest 270 years ago, the pug dogs in the streets would tear him to pieces. If he lived in the houses of 270 years ago, unrevised and uncorrected, he would die of rheumatism in a week. If he listened to the sermons of 270 years ago, he would perish with sadness and fatigue; and when a man cannot make a coat or a cheese for 50 years together, without making them better, can it be said that laws made in those days of ignorance, and framed in the fury of religious hatred, need no revision, and are capable of no amendment?—*Edin. Review.*

CONSCIENCE.

A vice sanctioned by the general opinion is merely a vice. The evil terminates in itself. A vice condemned by the general opinion produces a pernicious effect on the whole character. The former is a local malady, the latter a constitutional taint. In our own country, a woman forfeits her place in society, by what, in a man, is too commonly considered as an honourable distinction, and, at worst, as a venial error. The consequence is notorious. The moral principle of a woman is frequently more impaired by a single lapse from virtue, than that of a man by twenty years of intrigue.—*Edin. Review.*

EFFECTS OF THE NORMAN CONQUEST.

England, when the men of Normandy violated her soil, was wealthy and happy; and the system of society was favourable to liberty. Of all this they obliterated every vestige, and in exchange for these blessings, they entailed upon us a complicated and injurious scheme of jurisprudence, full of subtlety and chicanery, and well suited to the proverbially litigious spirit of the Normans, though entirely averse to the simplicity of the Anglo-Saxon institutions. That this state of things should, in an enlightened age, be permitted to subsist, is among the most astonishing of anomalies. Cheapness, promptitude, and accessibility, are qualities without which substantial justice cannot exist; and if these are to be found in our judicial code, we have not read it rightly. The greater part of what is good in our constitution we inherit from our Saxon ancestors: the rest is Norman.—*Eclectic Review.*

A FOREIGN ESTIMATE OF BRITAIN.

The people, in so many respects the most interesting in Europe; so worthy, by reason of its inviolable attachment to ancient usage, to be studied by him who is occupied in investigating the origin of institutions; so celebrated for the form of its government; joining to the energy of monarchy, the most unlimited liberty of the citizen; so powerful by the resources which the entire devotion of a great and wealthy nation presents to a sovereign, who is skilful in availing himself of them; this people is, at the same time, precisely that which differs most from all other countries ancient or modern. England, after having, during centuries, held the balance of Europe, at the present moment grasps the sceptre of the seas, and exercises a preponderating influence on the continent: no event in the world is indifferent to her, and almost everywhere she gives the decisive impulse. Blended in every interest, her constitution, so eagerly praised, which has been imitated in more than one country, and which will ultimately prevail everywhere; her judicial forms, judged so salutary, and many of which have been universally adopted, are hardly known out of Great Britain.—Myer's "*Esprit, Origine, et Progrès des Institutions Judiciaires.*"

REASON AND RELIGION.

"If we observe the style and method of the Scriptures, we shall find in them all over a constant appeal to men's reason, and to their intellectual faculties. If the mere dictates of the Church, or of *infallible men*, had been the resolution and foundation of faith, there had been no need of such a long thread of reasoning and discourse, as both our Saviour used when on earth and the Apostles used in their writings. We see the way of authority is not taken, but explanations are offered, proofs and illustrations are brought, to convince the mind; which shows that God, in the clearest manifestation of his will, would deal with us as with rational creatures, who are not to believe, but on persuasion; and to use our reason, in order to the attaining that persuasion."—*Bishop Burnet's Exposition of the 19th Article.*

"No mission can be looked on to be divine, that delivers anything derogating from the honour of the one, only, true, invisible God; or inconsistent with natural religion, and the rules of morality; because God, having discovered to men the unity and majesty of his eternal Godhead, and the truths of natural religion and morality by the light of reason, he cannot be supposed to lack the contrary by revelation; for that would be to destroy the evidence and use of reason, without which, men cannot be able to distinguish divine revelation from diabolical imposture."—*Locke's Posthumous Works*, p. 226.

A PERSIAN FABLE.

A little particle of rain,
That from a passing cloud descended,
Was heard thus idly to complain—
"My brief existence now is ended!
Outcast alike of earth and sky,
Useless to live, unknown to die!"

It chanced to fall into the sea,
And there an open shell received it;
And after years how rich was he
Who from its prison-house relieved it!
The drop of rain had formed a gem
To deck a monarch's diadem. —*Glasgow Courier.*

INFIDELITY IN THE MEDICAL PROFESSION.

The prevalence of scepticism among medical men has frequently been a topic of remark, and a subject of equal regret and astonishment. "Very illustrious examples," remarks Dr. Bateman's biographer, "are not wanting to prove, from time to time, that the knowledge of anatomy may indeed inspire religious sentiments." But it cannot be denied, that the dissecting-room has not always proved the best school of the heart. Strange to say, the anatomist has too often embraced a heartless materialism, while the astronomer has become an atheist.—*Eclec. Review*, No. 262.

THE DARDANELLES.

The Dardanelles is a little Turkish town in the narrowest and most beautiful part of the Straits—a strong fort, with enormous cannon, stands frowning on each side. These are the terrible fortifications of Mahomed II.—the Keys of Constantinople. The guns are enormous; of one in particular the muzzle is two feet three inches in diameter, but with Turkish ingenuity they are so placed as to be discharged when a ship is directly opposite. If the ship is not disabled by the first fire, and does not choose to go back and take another, she is safe. At every moment a new picture presents itself: a new fort, a new villa, or the ruins of an ancient city. A naked point on the European side, so ugly, when compared with all around it, as to attract particular attention, projects into the Strait; and here are the ruins of Sestos; here Xerxes built his bridge of boats, to carry over his millions to the conquest of Greece; and here, when he returned with the wreck of his army defeated and disgraced, found his bridge destroyed by the tempest, and in his rage ordered his chains to be thrown into the sea, and the waves to be lashed with rods. From this point too, Leander swam the Hellespont for love of Hero, and Lord Byron and Mr. Ekenhead for fun Nearly opposite, close to a Turkish fort, are the ruins of Abydos. Here Xerxes and Leander, and Lord Byron and Mr. Ekenhead, landed.—*Stephens' Incidents of Travel.*

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